

```
Db      61 ILGNQGSFLTKGPSKLNDRADSRRLMDQGNFLLIKNLKIEDSTYICEVEDQKEEVL 120
QY      121 LVFGLTANSDTHLLQGOSLTLTLSPPGSSPVQCSPPGKNIQGGKTLVSQLELQDSG 180
Db      121 LVFGLTANSDTHLLQGOSLTLTLSPPGSSPVQCSPPGKNIQGGKTLVSQLELQDSG 180
QY      181 TWTCTVLQNOQKKEFKIDIVLAFQKASSIVYKKEGEQVFPFLAFYVEKLTGSGELMW 240
Db      181 TWTCTVLQNOQKKEFKIDIVLAFQKASSIVYKKEGEQVFPFLAFYVEKLTGSGELMW 240
QY      241 QAEKRASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPLQALPOYAGSGNLTLA 300
Db      241 QAEKRASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPLQALPOYAGSGNLTLA 300
QY      301 LEAKTGKLNQKKEVNLVYMRATQLOKNTLCEVWGPTSKLMLSLKLENKEAKVSKREKPVW 360
Db      301 LEAKTGKLNQKKEVNLVYMRATQLOKNTLCEVWGPTSKLMLSLKLENKEAKVSKREKPVW 360
QY      361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTP----- 393
Db      361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPVAHADPEASTKGPSVFPPLAPSSKSTSGG 420
QY      394 ----- 393
Db      421 TAAAGCLVKDYPEPEVTVSNMNGALTSGVHTFPAVLQSSGLYSLSVTVPPSSSLGTQTY 480
QY      394 -----VEPKSCDKHTTCCPCPAPRLLGPSVLPFPKPKDTLMTSRPE 437
Db      481 ICNVNKHPSNTKVDKKEPKSCDKHTTCCPCPAPRLLGPSVLPFPKPKDTLMTSRPE 540
QY      438 VTCVVVDVSHEDPEVKFNNYVVDGVEVHNAKTKRREQOYNSTYRVVSVLTVLHQDMLNGKE 497
Db      541 VTCVVVDVSHEDPEVKFNNYVVDGVEVHNAKTKRREQOYNSTYRVVSVLTVLHQDMLNGKE 600
QY      498 YKCKVSNKALPAPIEKTIISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIA 557
Db      601 YKCKVSNKALPAPIEKTIISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIA 660
QY      558 VEVESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDSRWQOGNVEGCSVMHEALHNHTQ 617
Db      661 VEVESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDSRWQOGNVEGCSVMHEALHNHTQ 720
QY      618 KSLSLSPG 625
Db      721 KSLSLSPG 728

RESULT 8
AAY51078
ID AAY51078 standard; protein; 729 AA.
XX
AC AAY51078;
XX
DT 23-MAR-2000 (first entry)
XX
DE Human fusion protein CD4H-1.
XX
KW Fusion protein; human; CD4; IgG1; immunoglobulin; gp120;
KW anti-human immunodeficiency virus; CD4H-1.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN US6004781-A.
XX
PD 21-DEC-1999.
XX
PF 04-FEB-1994; 94US-00191708.
XX
PR 22-JAN-1988; 88US-00147351.
PR 23-JAN-1989; 89US-00295956.
PR 09-JUN-1992; 92US-00086781.
PR 12-APR-1993; 93US-00057952.
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XX
PA (GENO ) GEN HOSPITAL CORP.
XX
PI Seed B;
XX
DR WPI; 2000-085792/07.
XX
DR N-PSDB; AA244061.
XX
PT Fusion protein useful for the treatment of human immunodeficiency virus.
XX
PS Example 1; Col 15-30; 39pp; English.
XX
CC This invention describes a novel nucleic acid (I) encoding a fusion
CC protein comprising a DNA sequence encoding amino acids 1-173 of CD4 (II)
CC and a DNA sequence encoding a human immunoglobulin (Ig) heavy or light
CC chain (III). The products of the invention have anti-human
CC immunodeficiency virus (HIV) activity and are capable of binding to
CC gp120. The fusion protein is useful for treating human immunodeficiency
CC virus (HIV) or simian immunodeficiency virus (SIV). This sequence
CC represents the fusion protein CD4H-1 which is constructed from CD4 linked
CC to human IgG1 upstream of the CH1 region
XX
SQ Sequence 729 AA;
XX
Query Match 94.0%; Score 3209.5; DB 3; Length 729;
Best Local Similarity 85.6%; Pred. No. 3,5e-167;
Matches 623; Conservative 0; Mismatches 2; Indels 103; Gaps 1;
QY 1 NMRGVPFRHLVLVQLALPAATQGNKVLGKKGDVETCTASQKSIQFMKNSNQIX 60
Db 1 NMRGVPFRHLVLVQLALPAATQGNKVLGKKGDVETCTASQKSIQFMKNSNQIX 60
QY 61 ILGNQGSFLTKGPSKLNDRADSRRLMDQGNFLLIKNLKIEDSTYICEVEDQKEEVL 120
Db 61 ILGNQGSFLTKGPSKLNDRADSRRLMDQGNFLLIKNLKIEDSTYICEVEDQKEEVL 120
QY 121 LVFGLTANSDTHLLQGOSLTLTLSPPGSSPVQCSPPGKNIQGGKTLVSQLELQDSG 180
Db 121 LVFGLTANSDTHLLQGOSLTLTLSPPGSSPVQCSPPGKNIQGGKTLVSQLELQDSG 180
QY 181 TWTCTVLQNOQKKEFKIDIVLAFQKASSIVYKKEGEQVFPFLAFYVEKLTGSGELMW 240
Db 181 TWTCTVLQNOQKKEFKIDIVLAFQKASSIVYKKEGEQVFPFLAFYVEKLTGSGELMW 240
QY 241 QAEKRASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPLQALPOYAGSGNLTLA 300
Db 241 QAEKRASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPLQALPOYAGSGNLTLA 300
QY 301 LEAKTGKLNQKKEVNLVYMRATQLOKNTLCEVWGPTSKLMLSLKLENKEAKVSKREKPVW 360
Db 301 LEAKTGKLNQKKEVNLVYMRATQLOKNTLCEVWGPTSKLMLSLKLENKEAKVSKREKPVW 360
QY 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTP----- 393
Db 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPVAHADPEASTKGPSVFPPLAPSSKSTSGG 420
QY 394 ----- 393
Db 421 TAAAGCLVKDYPEPEVTVSNMNGALTSGVHTFPAVLQSSGLYSLSVTVPPSSSLGTQTY 480
QY 394 -----VEPKSCDKHTTCCPCPAPRLLGPSVLPFPKPKDTLMTSRPE 437
Db 481 ICNVNKHPSNTKVDKKEPKSCDKHTTCCPCPAPRLLGPSVLPFPKPKDTLMTSRPE 540
QY 438 VTCVVVDVSHEDPEVKFNNYVVDGVEVHNAKTKRREQOYNSTYRVVSVLTVLHQDMLNGKE 497
Db 541 VTCVVVDVSHEDPEVKFNNYVVDGVEVHNAKTKRREQOYNSTYRVVSVLTVLHQDMLNGKE 600
QY 498 YKCKVSNKALPAPIEKTIISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIA 557
Db 601 YKCKVSNKALPAPIEKTIISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIA 660
QY 558 VEVESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDSRWQOGNVEGCSVMHEALHNHTQ 617
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Db      661 VEMESNGQPENNYKTTPEVLDSGSEFLYSKLTVDKSRWQGNVFSCEVMHEALHNYTQ 720
QY      618 KSLSLSPG 625
Db      721 KSLSLSPG 728

```

RESULT 9

AAVS1082
ID AAVS1082 standard; protein; 616 AA.

AC AAVS1082;

DT 23-MAR-2000 (first entry)

DE Human fusion protein CD4Bgamma1.

XX Fusion protein; human; CD4; IgG1; immunoglobulin; gp120;

KW anti-human immunodeficiency virus; CD4Bgamma1.

XX Homo sapiens.

OS Synthetic.

FN US6004781-A.

PD 21-DEC-1999.

PF 04-FEB-1994; 94US-00191708.

XX 22-JAN-1988; 88US-00147351.

PR 23-JAN-1989; 89US-00295956.

PR 09-JUN-1992; 92US-00896781.

PR 12-APR-1993; 93US-00057952.

XX (GENO) GEN HOSPITAL CORP.

PI Seed B;

DR WPI; 2000-085792/07.

DR N-PSDB; AAZ44065.

PT Fusion protein useful for the treatment of human immunodeficiency virus.

XX Example 1; Col 59-70; 39pp; English.

XX This invention describes a novel nucleic acid (I) encoding a fusion

CC protein comprising a DNA sequence encoding amino acids 1-173 of CD4 (II)

CC and a DNA sequence encoding a human immunoglobulin (Ig) heavy or light

CC chain (III). The products of the invention have anti-human

CC immunodeficiency virus (HIV) activity and are capable of binding to

CC gp120. The fusion protein is useful for treating human immunodeficiency

CC virus (HIV) or simian immunodeficiency virus (SIV). This sequence

CC represents the fusion protein CD4Bgamma1 which is constructed from CD4

XX linked to human IgG1 upstream of the hinge region

XX Sequence 616 AA;

Query Match 92.8%; Score 3169; DB 3; Length 616;

Best Local Similarity 97.8%; Pred. No. 4,8e-165; Indels 10; Gaps 2;

Matches 611; Conservative 0; Mismatches 4;

1 MNRGVFPHLLLVLTQALLPATQGNKVLGKGGDTVELTCTASQKSIQFHWKNSNIK 60

1 MNRGVFPHLLLVLTQALLPATQGNKVLGKGGDTVELTCTASQKSIQFHWKNSNIK 60

1 ILGNQGSFLTGKPSKLNDRADSRSLMDQGNFPLIIKUKIEDSDTYICEVEDQKEEYOL 120

1 ILGNQGSFLTGKPSKLNDRADSRSLMDQGNFPLIIKUKIEDSDTYICEVEDQKEEYOL 120

1 ILGNQGSFLTGKPSKLNDRADSRSLMDQGNFPLIIKUKIEDSDTYICEVEDQKEEYOL 120

1 ILGNQGSFLTGKPSKLNDRADSRSLMDQGNFPLIIKUKIEDSDTYICEVEDQKEEYOL 120

1 ILGNQGSFLTGKPSKLNDRADSRSLMDQGNFPLIIKUKIEDSDTYICEVEDQKEEYOL 120

1 ILGNQGSFLTGKPSKLNDRADSRSLMDQGNFPLIIKUKIEDSDTYICEVEDQKEEYOL 120

1 ILGNQGSFLTGKPSKLNDRADSRSLMDQGNFPLIIKUKIEDSDTYICEVEDQKEEYOL 120

1 ILGNQGSFLTGKPSKLNDRADSRSLMDQGNFPLIIKUKIEDSDTYICEVEDQKEEYOL 120

1 ILGNQGSFLTGKPSKLNDRADSRSLMDQGNFPLIIKUKIEDSDTYICEVEDQKEEYOL 120

1 ILGNQGSFLTGKPSKLNDRADSRSLMDQGNFPLIIKUKIEDSDTYICEVEDQKEEYOL 120

1 ILGNQGSFLTGKPSKLNDRADSRSLMDQGNFPLIIKUKIEDSDTYICEVEDQKEEYOL 120

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QY      181 TWICTVLQONKQVEFKIDIVLAFQKASSIVYKKGGEQVEFSPEPLATVEKLTGSGELMW 240
Db      181 TWICTVLQONKQVEFKIDIVLAFQKASSIVYKKGGEQVEFSPEPLATVEKLTGSGELMW 240
QY      241 QAERASSSKSWITFDLKNKEVSRYKRYQDPKLGKGLPLHLTLPLQALPOYAGSGLTLA 300
Db      241 QAERASSSKSWITFDLKNKEVSRYKRYQDPKLGKGLPLHLTLPLQALPOYAGSGLTLA 300
QY      301 LEAKTGKHOEVNLVVMRATOLOGLTCCEVWGPTSPKMLSLKLENKAQVSKKEKPYMV 360
Db      301 LEAKTGKHOEVNLVVMRATOLOGLTCCEVWGPTSPKMLSLKLENKAQVSKKEKPYMV 360
QY      361 LNPBAGMOCCLSDSGVLESNIKVLPTWSTPYEPRSCDXTHTCPCPAPBELLGSPSVF 420
Db      361 LNPBAGMOCCLSDSGVLESNIKVLPTWSTPYEPRSCDXTHTCPCPAPBELLGSPSVF 420
QY      421 LFPKPKDTLMISTPEVTCVVDVSHEDPEVKKNWYVDGEVNNATKTPREEDQNSTYR 480
Db      421 LFPKPKDTLMISTPEVTCVVDVSHEDPEVKKNWYVDGEVNNATKTPREEDQNSTYR 480
QY      481 VVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKQPREPOVYTLPPSRDELTKN 540
Db      481 VVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISKAKQPREPOVYTLPPSRDELTKN 540
QY      541 QVSLTCLVKGFPSPDIWEMESNGQPENNYKTTPEVLDSGSEFLYSKLTVDKSRWQGN 600
Db      541 QVSLTCLVKGFPSPDIWEMESNGQPENNYKTTPEVLDSGSEFLYSKLTVDKSRWQGN 600
QY      601 VFGCSVNHHEALHNNYTKSLSLSPG 625
Db      601 VFGCSVNHHEALHNNYTKSLSLSPG 625

```

RESULT 10

AAVS9172
ID AAVS9172 standard; protein; 616 AA.

AC AAVS9172;

DT 14-MAR-2000 (first entry)

DE CD4-Ig fusion protein CD4Bgamma1.

XX HIV; extracellular; CD4; gp120; immunoglobulin; Ig; fusion protein;

KW secreted protein; SIV infection; medicament.

XX Homo sapiens.

OS Synthetic.

FN CA1340741-C.

PD 14-SEP-1999.

PF 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

PR 20-JAN-1989; 89CA-00588749.

The invention provides a fusion gene encoding a fusion protein that comprises an extracellular CD4 DNA sequence or its fragment which binds to HIV gp120 when fused to an immunoglobulin (Ig) chain and the DNA

CC sequence of an Ig heavy or light chain, where the DNA sequence encoding
CC the variable region has been replaced with the DNA sequence which encodes
CC extracellular CD4 or its gp120 binding fragment. The fusion protein is
CC capable of being secreted. The fusion proteins are useful for treating
CC HIV or SIV infections in animals, preferably humans. They are also useful
CC for producing medicaments which can be used for treating HIV or SIV
CC infections in humans. The present sequence represents the fusion protein
CC CD4Bammal where the CD4 is linked to human IgG1 at the BamI site
CC downstream from the hinge region
XX

SQ Sequence 616 AA;

Query Match

92.8%; Score 3169; DB 3; Length 616;

Best Local Similarity 97.8%; Pred. No. 4.8e-165;

Matches 611; Conservative 0; Mismatches 4; Indels 10; Gaps 2;

```
QY 1 NMRGVFRRHLVLVQLALPPATQGNKVVLGKKGDVTELTCTASQKSIQFHWKNSNQIK 60
DB 1 NMRGVFRRHLVLVQLALPPATQGNKVVLGKKGDVTELTCTASQKSIQFHWKNSNQIK 60
QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDDTHLLOGSILTLTLESPPGSSPSVQCSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDDTHLLOGSILTLTLESPPGSSPSVQCSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTOPDKLQMGKPLHLTLPPALPOYAGSGLTLTA 300
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTOPDKLQMGKPLHLTLPPALPOYAGSGLTLTA 300
QY 301 LEAKTGKLTQHEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWV 360
DB 301 LEAKTGKLTQHEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWV 360
QY 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPVEBKSCDKTHTCPCAPPELLGSPSVF 420
DB 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPVEBKSCDKTHTCPCAPPELLGSPSVF 420
QY 421 LPPPKKDTLMTSRTEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTRPREEQYNSTR 480
DB 421 LPPPKKDTLMTSRTEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTRPREEQYNSTR 480
QY 481 VVSVLTVLHODMLNGKEYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 540
DB 481 VVSVLTVLHODMLNGKEYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 540
QY 541 QVSLTCLVNGFYPSDIAVEMESNGQPENNYKTPPVLDSGSEFLYSKLTVDKSRMQQGN 600
DB 541 QVSLTCLVNGFYPSDIAVEMESNGQPENNYKTPPVLDSGSEFLYSKLTVDKSRMQQGN 600
QY 601 VPSGCSVMHEALNHYTKSLISLSPG 625
DB 601 VPSGCSVMHEALNHYTKSLISLSPG 625
QY 591 VFSGCSVMHEALNHYTKSLISLSPG 615
DB 591 VFSGCSVMHEALNHYTKSLISLSPG 615
```

RESULT 11

ID AAP93012 standard; protein; 614 AA.

XX AAP93012;

XX 25-MAR-2003 (revised)

DT 03-AUG-1992 (first entry)

DE Genetic construct which encodes CD4 linked to human IgG1 at the BamI site

XX downstream from the hinge region (fusion protein CD4Bammal).

KW Fusion protein; immunoglobulin-like molecule; HIV; SIV; therapy;
KW diagnosis; CD4; gp120; binding fragment; glycoprotein; variable region.
XX

OS Homo sapiens.

PN EP325262-A.

PD 26-JUL-1989.

PF 20-JAN-1989; 89EP-00100913.

PR 22-JAN-1988; 88US-00147351.

PA (GENO) GEN HOSPITAL CORP.

PI Seed B;

DR WPI; 1989-214472/30.

DR N-PSDB; AAN90360.

PT Immunoglobulin-CD4 fusion proteins - used for treating HIV or SIV
PT infections or detecting HIV or SIV in sample.

PS Example; Table 5, Page 48-55; 68pp; English.

The fusion protein genes of the invention pref. comprises cDNA sequences
CC which encode CD4 or a fragment which binds gp120 ligated to an expression
CC plasmid which encodes an antibody in which the variable region of the
CC gene has been deleted (see WO87-02671). The CD4 portion of the fusion
CC protein may comprise the complete CD4 sequence, the 370 AA extracellular
CC region and the membrane spanning domain, or the extracellular region. The
CC Ig heavy chain is pref. from IGM, IgG1 or IgG3. The following are
CC specifically claimed: fusion proteins CD4Bammal, CD4Mmu, CD4Pmu,
CC CD4Bammal, and CD4Mmu (No. 67608), CD4Bammal (No. 67609) and
CC PCDBammal (No. 67610). (Updated on 25-MAR-2003 to correct PA field.)
XX

SQ Sequence 614 AA;

Query Match

91.9%; Score 3138; DB 1; Length 614;

Best Local Similarity 97.1%; Pred. No. 2.3e-163;

Matches 607; Conservative 0; Mismatches 6; Indels 12; Gaps 3;

```
QY 1 NMRGVFRRHLVLVQLALPPATQGNKVVLGKKGDVTELTCTASQKSIQFHWKNSNQIK 60
DB 1 NMRGVFRRHLVLVQLALPPATQGNKVVLGKKGDVTELTCTASQKSIQFHWKNSNQIK 60
QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDDTHLLOGSILTLTLESPPGSSPSVQCSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDDTHLLOGSILTLTLESPPGSSPSVQCSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTOPDKLQMGKPLHLTLPPALPOYAGSGLTLTA 300
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTOPDKLQMGKPLHLTLPPALPOYAGSGLTLTA 300
QY 301 LEAKTGKLTQHEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWV 360
DB 301 LEAKTGKLTQHEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWV 360
QY 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPVEBKSCDKTHTCPCAPPELLGSPSVF 420
DB 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPVEBKSCDKTHTCPCAPPELLGSPSVF 420
QY 421 LPPPKKDTLMTSRTEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTRPREEQYNSTR 480
DB 421 LPPPKKDTLMTSRTEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTRPREEQYNSTR 480
QY 481 VVSVLTVLHODMLNGKEYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 540
DB 481 VVSVLTVLHODMLNGKEYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 540
QY 541 QVSLTCLVNGFYPSDIAVEMESNGQPENNYKTPPVLDSGSEFLYSKLTVDKSRMQQGN 600
DB 541 QVSLTCLVNGFYPSDIAVEMESNGQPENNYKTPPVLDSGSEFLYSKLTVDKSRMQQGN 600
QY 601 VPSGCSVMHEALNHYTKSLISLSPG 625
DB 601 VPSGCSVMHEALNHYTKSLISLSPG 625
QY 591 VFSGCSVMHEALNHYTKSLISLSPG 615
DB 591 VFSGCSVMHEALNHYTKSLISLSPG 615
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QY 461 VSVLTVLHODWLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKN 540
DB 471 VVSVLTVLHODWLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKN 528
QY 541 QVSLTCLVKGFPSPDIIVEMESNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMOQGN 600
DB 529 QVSLTCLVKGFPSPDIIVEMESNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMOQGN 588
QY 601 VFSCSVMEALHNHYTQKSLSLSPG 625
DB 589 VFSCSVMEALHNHYTQKSLSLSPG 613

RESULT 12
AAB19511
ID AAB19511 standard; protein; 616 AA.
XX
AC AAB19511;
XX
DT 09-JAN-2001 (first entry)
XX
DE CD4-IgG1 fusion protein CH4Bgammal.
XX
KM CD4; IgG1; human; CD4Bgammal; fusion protein; immunoglobulin; HIV; SIV;
KM gp120; therapy; diagnosis.
XX
OS Homo sapiens.
XX
FH Key 1.395 Location/Qualifiers
FT Protein /note="CD4 extracellular region"
FT Protein /note="IgG1 heavy chain"
XX
PM US6117656-A.
XX
PD 12-SEP-2000.
XX
PF 07-JUN-1995; 95US-00479353.
XX
PR 22-JAN-1988; 88US-00147351.
PR 23-JAN-1989; 89US-00295956.
PR 09-JUN-1992; 92US-00896781.
PR 12-APR-1993; 93US-00057952.
PR 04-FEB-1994; 94US-00191708.
XX
PA (GCHO ) GEN HOSPITAL CORP.
XX
PI Seed B;
XX
DR MPI; 2000-586558/55.
DR N-PSDB; AAA50664.
XX
FT CD4-immunoglobulin fusion proteins, useful for targeting gp120 of HIV or
FT SIV.
XX
PS Example 1; Col 59-70; 39pp; English.
XX
CC The present sequence is that of fusion protein CD4Bgammal comprising the
CC extracellular portion of CD4, which binds to HIV gp120, linked at its C-
CC terminus to the human IgG1 heavy chain. To obtain the fusion protein, DNA
CC encoding CD4 was linked to IgG1 DNA at the BamI site downstream of the
CC hinge region (see AAA50664). Fusion protein CD4Bgammal and a nucleic acid
CC encoding it are claimed. Also claimed are a vector comprising the nucleic
CC acid, and a method of producing the fusion protein in secreted form using
CC a transformed host cell. The fusion protein may further comprise a
CC therapeutic agent, radiolabel or NMR imaging agent. The fusion protein
CC can be administered to an animal (including humans) for treatment of HIV
CC or SIV infection, and can also be used in assays for HIV or SIV. Imaging
CC and tissue stains. IgG1 fusion proteins such as CD4Bgammal provide both
CC complement-mediated and cell-mediated immunity
XX

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SQ Sequence 616 AA;
Query Match 90.1%; Score 3077; DB 3; Length 616;
Best Local Similarity 96.2%; Pred. No. 5e-160;
Matches 600; Conservativity 0; Mismatches 14; Indels 10; Gaps 2;

QY 1 MNRGVPFRHLILVQLALLPAATQGNKVVLGKGDYELTCTASQKSIQHMKNQIK 60
DB 1 MNRGVPFRHLILVQLALLPAATQGNKVVLGKGDYELTCTASQKSIQHMKNQIK 60
QY 61 ILNGQSFLLTKGPKLNDRADSRSLWDQGNFLLIKNLKIEDPDYICEDQKEEYQL 120
DB 61 ILNGQSFLLTKGPKLNDRADSRSLWDQGNFLLIKNLKIEDPDYICEDQKEEYQL 120
QY 121 LVFGLTANSDTHLLIQGSLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDTHLLIQGSLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 121 LVFGLTANSDTHLLIQGSLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDTHLLIQGSLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 181 TWICTTVLQNKQKVEFKIDIVVLAFOKASSIVYKKEGQVEFSPLAFTVEKLTCSGELMW 240
DB 181 TWICTTVLQNKQKVEFKIDIVVLAFOKASSIVYKKEGQVEFSPLAFTVEKLTCSGELMW 240
QY 241 QABRASSSKSWITPDLKNKEVSRYRQDPKLOMGKPLHLTLPOALPOYAGSGNLTIA 300
DB 241 QABRASSSKSWITPDLKNKEVSRYRQDPKLOMGKPLHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKLEQEVNLVVRATQLOKNTLCEVWGPTSPKLMLSLKLENKAKVSKREKPVW 360
DB 301 LEAKTGKLEQEVNLVVRATQLOKNTLCEVWGPTSPKLMLSLKLENKAKVSKREKPVW 360
QY 361 LNPEAGMWQCLSDSGVLLBSNKKVLPWSTPVEPKSCDKHTCPCPAPELLGSPSVF 420
DB 361 LNPEAGMWQCLSDSGVLLBSNKKVLPWSTPVEPKSCDKHTCPCPAPELLGSPSVF 420
QY 421 LFPKPKDQTLMSRTPVTCVVDVSHEDPEVKFMVVDGVEYNATKTPREQYNSYR 480
DB 421 LFPKPKDQTLMSRTPVTCVVDVSHEDPEVKFMVVDGVEYNATKTPREQYNSYR 480
QY 481 VSVLTVLHODWLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKN 540
DB 471 VVSVLTVLHODWLNKKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKN 530
QY 541 QVSLTCLVKGFPSPDIIVEMESNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMOQGN 600
DB 531 QVSLTCLVKGFPSPDIIVEMESNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMOQGN 590
QY 601 VFSCSVMEALHNHYTQKSLSLSPG 624
DB 591 VFSCSVMEALHNHYTQKSLSLSPG 614

RESULT 13
AAR26531
ID AAR26531 standard; protein; 534 AA.
XX
AC AAR26531;
XX
DT 25-MAR-2003 (revised)
DT 28-JAN-1993 (first entry)
XX
DE Sequence of CD4-IgG1 chimeric heavy chain heterotetramer.
XX
KM CD4-gamma 1 chimeric heavy chain homodimer; expression vector; HIV;
KM therapy; diagnostic agent; inhibition.
XX
OS Synthetic.
XX
FH Key 205.302 Location/Qualifiers
FT Region /label= CH1
FT Region /label= CH1
FT Region /label= hinge
FT Region /label= hinge

```


Query Match 64.1%; Score 2189; DB 2; Length 435;
 Best Local Similarity 69.4%; Pred. No. 1e-111;
 Matches 433; Conservative 0; Mismatches 1; Indels 190; Gaps 1;

QY 2 NRGVPRHLLLVQLALLPAATQGNKVLGKKGDIVELTCTASQKKSIOFHMKNNOIKI 61
 DB 1 NRGVPRHLLLVQLALLPAATQGNKVLGKKGDIVELTCTASQKKSIOFHMKNNOIKI 60
 QY 62 LGNOSFLLTKGPKSKNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEVOL 121
 DB 61 LGNOSFLLTKGPKSKNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEVOL 120
 QY 122 VFGTLNSDTHLLQGSLLTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSGT 181
 DB 121 VFGTLNSDTHLLQGSLLTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSGT 180
 QY 182 WTCVTVLQGNQKVEFKIDIVLAFQKASSIVYKKEGQVEFSPFLAFTVEKLTGSGELMWQ 241
 DB 181 WTCVTVLQGNQKVEFKIDIVLAF----- 203
 QY 242 AERASSSKSWITTFDLKKNKESVKKVITQDPKLQMGKKLPLHLTLPLQALPQYAGSGNLTAL 301
 DB 204 ----- 203
 QY 302 EAKTGKLGHEVNLVWMRATQLOKNLTCCEWGPSPKMLSLKLENKAKVSKREKPVVL 361
 DB 204 ----- 203
 QY 362 NPEAGMWQCLSDSGVLLSENIKVLPTWSTFVEPKSCDKTHTCPCPAPPELLGSPVFL 421
 DB 204 -----EPKSCDKTHTCPCPAPPELLGSPVFL 230
 QY 422 FPPKPKDTLMTISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTPREBOYNSTRV 481
 DB 221 FPPKPKDTLMTISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTPREBOYNSTRV 290
 QY 482 VSVLTVLHODMLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTLNQ 541
 DB 221 VSVLTVLHODMLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTLNQ 350
 QY 542 VSLTCLVKGFPYPSDIAVEMESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRKQQGNV 601
 DB 351 VSLTCLVKGFPYPSDIAVEMESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRKQQGNV 410
 QY 602 FSCSVMEHALHNHYTQKSLSLSPG 625
 DB 411 FSCSVMEHALHNHYTQKSLSLSPG 434

RESULT 15
 AAE37574
 ID AAE37574 standard; protein; 450 AA.
 XX
 AC AAE37574;
 XX
 DT 27-AUG-2003 (first entry)
 XX
 DE Human D1D2-Ig alphapc fusion protein.
 XX
 KW Human; CD4; cluster of differentiation factor 4; immunoglobulin; Ig;
 XX human immunodeficiency virus; gene therapy; vaccine; HIV-1 infection; D1;
 XX D2; alpha tailpiece; alphapc; fusion protein.
 OS Homo sapiens.
 XX
 PN WO2003040311-A2.
 XX
 PD 15-MAY-2003.
 XX
 PF 24-OCT-2002; 2002WO-US034393.
 XX
 PR 25-OCT-2001; 2001US-0346231P.
 XX

PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
 XX
 PI Arthos J, Cicala C, Fauci AS;
 XX
 DR WPI; 2003-441545/41.
 XX
 DR N-PSDB; AAD29113.
 XX
 PT New CD4 polypeptide ligated at its C-terminus with a portion of an
 PT immunoglobulin, useful for preparing a composition for treating or
 PT preventing HIV-1 infection.
 XX
 PS Example 1; Page 47; 100pp; English.
 XX
 SS The invention relates to a CD4 (cluster of differentiation factor 4)
 CC polypeptide ligated at its C-terminus with a portion of an mammalian Ig
 CC (Ig) comprising a hinge region and a constant domain of a mammalian Ig
 CC heavy chain. The polypeptide comprises a tailpiece from the C-terminus of
 CC the heavy chain of an Iga or Igm antibody. Polypeptides of the invention
 CC are useful for preparing a composition for treating or preventing human
 CC immunodeficiency virus (HIV)-1 infection. The invention is useful in gene
 CC therapy and also in the preparation of vaccines. The present sequence is
 CC a fusion protein which comprises a human Iga alpha tailpiece (alphapc), a
 CC human IgG constant region comprising a hinge, a CH2 and CH3 region and a
 CC human CD4 D1D2 domain
 CC
 SQ Sequence 450 AA;

Query Match 63.2%; Score 2156.5; DB 6; Length 450;
 Best Local Similarity 67.0%; Pred. No. 6.5e-110;
 Matches 431; Conservative 2; Mismatches 5; Indels 205; Gaps 2;

QY 1 MNRGVPFRHLLLVQLALLPAATQGNKVLGKKGDIVELTCTASQKKSIOFHMKNNOIK 60
 DB 1 MNRGVPFRHLLLVQLALLPAATQGNKVLGKKGDIVELTCTASQKKSIOFHMKNNOIK 60
 QY 61 ILNQGSPFLTKGPKSKNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEVOL 120
 DB 61 ILNQGSPFLTKGPKSKNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEVOL 120
 QY 121 LVFGLTNSDTHLLQGSLLTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTNSDTHLLQGSLLTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 WTCVTVLQGNQKVEFKIDIVLAFQKASSIVYKKEGQVEFSPFLAFTVEKLTGSGELMW 240
 DB 181 WTCVTVLQGNQKVEFKIDIVLAF----- 203
 QY 241 QAEERASSSKSWITTFDLKKNKESVKKVITQDPKLQMGKKLPLHLTLPLQALPQYAGSGNLTAL 300
 DB 204 ----- 203
 QY 301 LEAKTGKLGHEVNLVWMRATQLOKNLTCCEWGPSPKMLSLKLENKAKVSKREKPVVL 360
 DB 204 ----- 203
 QY 361 LNPAGMWQCLSDSGVLLSENIKVLPTWSTFVEPKSCDKTHTCPCPAPPELLGSPVFL 420
 DB 204 -----SADKTHTCPCPAPPELLGSPVFL 226
 QY 421 LFPKPKDTLMTISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTPREBOYNSTRV 480
 DB 227 LFPKPKDTLMTISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTPREBOYNSTRV 286
 QY 481 VSVLTVLHODMLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTLNQ 540
 DB 287 VSVLTVLHODMLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTLNQ 346
 QY 541 QVSLTCLVKGFPYPSDIAVEMESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRKQQGN 600
 DB 347 QVSLTCLVKGFPYPSDIAVEMESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRKQQGN 406
 QY 601 VFCSVMEHALHNHYTQKSLSLSPG-----IQLEDFC 632
 |||

Db 407 VFSCSVMEALHNHYTQKSLSLAGKPTHVNVSVNAEVDGTC 449

RESULT 16

AA026783 standard; protein; 530 AA.

AC AAR26783;

XX 24-OCT-2003 (revised)

DT 25-MAR-2003 (revised)

DT 06-FEB-1993 (first entry)

XX CD4-IgG2 chimeric heavy chain.

DE homodimer; soluble CD4; T cell receptor; CD4 antigen; high recovery;

KM chimeric; increased serum half life; HIV infection; AIDS; ss.

XX Homo sapiens.

OS Chimeric.

XX Key Location/Qualifiers

FT Domain 1..205 /label= CD4 domain

FT Domain 206..302 /label= CH1 domain

FT Domain 303..312 /label= hinge domain

FT Domain 313..423 /label= CH2 domain

FT Domain 424..530 /label= CH3 domain

XX MO9213947-A1.

XX 20-AUG-1992.

XX 10-FEB-1992; 92MO-US001143.

XX 08-FEB-1991; 91US-00653684.

XX (PROG-) PROGENICS PHARM INC.

PI Beaudry GA, Madden PJ;

XX WPI, 1992-300034/36.

DR N-PSDB; AAQ28089.

DR CD4-gamma-2 and CD4-IgG2 chimera(s) and expression vectors - for

PT treatment, prevention and diagnosis of HIV infection.

XX Claim 15; Fig 4; 90pp; English.

XX This sequence represents a CD4-IgG2 chimeric heavy chain heterotrimer

CC it was produced by expression of the coding mutagenised cDNA (produced as

CC described in AAQ28089) in Dftr-CHO cells. The protein is efficiently

CC assembled intracellularly and effectively secreted from mammalian cells

CC pret. CHO, COS, or myeloma cells as a heterotrimer, enabling high

CC recovery and purification from the medium of cells expressing it. It

CC possesses increased serum half-life and has increased avidity for HIV cf.

CC heavy chain dimer. It can inhibit HIV infection of CD4+ cells and block

CC the spread of HIV infection within a patient. Attachment to a detectable

CC marker makes it useful in an assay for HIV or SIV infection, and it can

CC also be linked to toxins, eg Diphtheria, Pseudomonas exotoxin A (domains

CC I or II) or the deglycosylated A-chain of ricin. (Updated on 25-MAR-2003

CC to correct PN field.) (Updated on 24-OCT-2003 to standardise OS field)

XX Sequence 530 AA:

Query Match 63.0%; Score 2151; DB 2; Length 530;

Best Local Similarity 70.4%; Pred. No. 1.5e-109;

Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

QY 1 NMRGVPFRHLLVQLALLPAPATQGNKVVLGKQDVTVELTCTASQKSIQHMKNNSNQIK 60

Db 1 NMRGVPFRHLLVQLALLPAPATQGNKVVLGKQDVTVELTCTASQKSIQHMKNNSNQIK 60

QY 61 IINGNGSFUTKGPSTKLNDRADSRRLMDQGNFPLIINKULKTEDSTTYICEVEDQKEEVL 120

Db 61 IINGNGSFUTKGPSTKLNDRADSRRLMDQGNFPLIINKULKTEDSTTYICEVEDQKEEVL 120

QY 121 LVFGLTANSDPTHLQGGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

Db 121 LVFGLTANSDPTHLQGGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

QY 181 TWTCTVLQNKQKVEPKIDIVLAFQKASSIYKKEQVEFSPLAFTVEKLTGSGELMW 240

Db 181 TWTCTVLQNKQKVEPKIDIVLAF--AST-----KGPEV---FPLA----- 216

QY 241 QAERASSKSWITFDLKNKEVSVKSVTODPKLQMGKKLPLHLTLFQALPYAG--SGNL 297

Db 217 -----PCSRSTSESTPALGLCLVKDYFPPEVTVSMNSGALTSGVH 255

QY 298 TLALAKTKGLHQEVNLVWGAATOL-QKNLCEVWGPTSPKLMLSKLENKAQVSKREK 356

Db 256 TFPVALQSSGLSYSSVTVBPSSNFGTQYTCNV-----DHK 292

QY 357 PVMVLNPEAGMWQCLLSDSGVLTLESNIKVLPTWSTPVEPKSCDXTHTCPCPAPBELGG 416

Db 293 P-----SNKKVDKT-----VERKCCVE---CPCPAPP-VAG 320

QY 417 PSVFLPPPKXDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGYEVNNAKTKPREQYN 476

Db 321 PSVFLPPPKXDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGYEVNNAKTKPREQFN 380

QY 477 STYRVSVLTVHOMLNGKEKCKVSNKALPAPLEKTIISAKGQPREPOVYTLPPSRDE 536

Db 381 STYRVSVLTVHOMLNGKEKCKVSNKALPAPLEKTIISAKGQPREPOVYTLPPSRDE 440

QY 537 LTKNOVSLTCLVKGFPSPDIAYEWESNGQPENNYKTPPVLDSDSFFLYSKLTVDKSRW 596

Db 441 MTKNOVSLTCLVKGFPSPDIAYEWESNGQPENNYKTPPVLDSDSFFLYSKLTVDKSRW 500

QY 597 QOQNVFSCSVMEALHNHYTQKSLSLSPG 625

Db 501 QOQNVFSCSVMEALHNHYTQKSLSLSPG 529

RESULT 17

AA085080

ID AA085080 standard; protein; 530 AA.

XX AC AA085080;

XX 19-JUN-2000 (first entry)

XX CD4-IgG2 chimeric heterotrimer heavy chain amino acid sequence.

XX CD4-IgG2 chimeric heterotrimer heavy chain amino acid sequence.

XX CD4-IgG2 chimeric heavy chain heterotrimer; immunconjugate; treatment;

KM cytotoxic radionuclide; cell surface glycoprotein; prevent; infection;

KM cellular immune response interaction mediator; HIV interaction; staging;

XX prognosis; envelope glycoprotein burden; human.

OS Homo sapiens.

PN US6034223-A.

XX 07-MAR-2000.

XX 07-JUN-1995; 95US-00477460.

XX 07-AUG-1992; 92US-00927931.

PR 06-AUG-1993; 93MO-US007422.

PR 03-FEB-1995; 95US-00379516.

XX (PROG-) PROGENICS PHARM INC.

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XX Allaway GP, Maddon PJ;
XX
XX MPI: 2000-269502/23.
XX
XX N-PSDB: AA298856.
XX
XX New immunocjugate, used to treat, prevent or image human immune
XX deficiency virus infection, comprises radionuclide attached to
XX heterotrimer of CD4-immunoglobulin chimeras.
XX
XX PS Disclosure: Fig 4; 58pp; English.
XX
XX This sequence represents the CD4-IgG2 chimeric heavy chain amino acid
XX sequence from the CD4-IgG2 chimeric heterotrimer. The invention relates
XX to an immunocjugate comprising a cytotoxic radionuclide and a
XX heterotrimer of two heavy chains and two light chains. The cytotoxic
XX radionuclide is linked to either the heavy chains or the light chains, or
XX to all four chains, directly or through a bifunctional chelator. Both
XX heavy chains are chimeric CD4-Ig (immunoglobulin) G2 chains encoded by
XX vector CD4-IgG2HC-PRCCMV (ATCC 75193) and both light chains are chimeric
XX CD4-kappa chains encoded by vector CD4-KLC-PRCCMV (ATCC 75194). CD4 is a
XX non-polymorphic cell surface glycoprotein that is expressed on the
XX surface of helper T lymphocytes, cells of the monocyte/macrophage lineage
XX and dendritic cells. CD4 associates with major histocompatibility complex
XX (MHC) class II molecules on the surface of antigen presenting cells to
XX mediate efficient cellular immune response interactions. In humans CD4 is
XX the target of interaction with the human immunodeficiency virus HIV. The
XX immunocjugate is used to kill cells infected with HIV, and for treating
XX or preventing infection. It is also used for imaging HIV-infected tissues
XX (for staging or prognosis of infection), and for assessing efficacy of
XX treatments). The immunocjugate is also used to determine the HIV
XX envelope glycoprotein burden, once determined, this information is used
XX in the staging and prognosis of HIV infected patients. The
XX immunocjugate should be active against all strains of HIV (since the
XX CD4-gp120 interaction is essential for infection). The heterotrimers
XX are assembled intracellularly and secreted efficiently from mammalian
XX cells, allowing high recovery and purification from the culture medium.
XX They have longer half-life in serum and greater avidity than heavy chain
XX dimers
XX
XX Sequence 530 AA;
XX
XX Query Match 63.0%; Score 2151; DB 3; Length 530;
XX Best Local Similarity 70.4%; Pred. No. 1.5e-109;
XX Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;
XX
QY 1 MNRGVPFRHLLVQLALPAAATQGNKVTGKGGDTVELCTTASQKSIQPHMKNNSQIK 60
DB 1 MNRGVPFRHLLVQLALPAAATQGNKVTGKGGDTVELCTTASQKSIQPHMKNNSQIK 60
QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMPCGNFPLIKMLKTEDSTTYCEVEDQKEEYQL 120
DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMPCGNFPLIKMLKTEDSTTYCEVEDQKEEYQL 120
QY 121 LVFGILTANSDTHLLQGQSLITLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGILTANSDTHLLQGQSLITLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 181 TWTCTVLONOKKVERKIDIVLAFOKASSIYKKEGEQVESFLAFLVEKLTSGGELMW 240
DB 181 TWTCTVLONOKKVERKIDIVLAFOKASSIYKKEGEQVESFLAFLVEKLTSGGELMW 240
QY 191 TWTCTVLONOKKVERKIDIVLAFAST--GKPSV--FPLA----- 216
DB 191 TWTCTVLONOKKVERKIDIVLAFAST--GKPSV--FPLA----- 216
QY 241 QAERASSKSMITPFLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAG--SSNTL 297
DB 241 QAERASSKSMITPFLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAG--SSNTL 297
QY 298 TLAEAKTKGLHQEVNLVVMRATQI--QKNTCEVNGPTSPKLMSLKLENKARVSKREK 356
DB 298 TLAEAKTKGLHQEVNLVVMRATQI--QKNTCEVNGPTSPKLMSLKLENKARVSKREK 356
QY 357 PWMVIANPAGMKQCLLSQGVLESNTKVLPTWSTPVEPKSCDKTHTCPCPAPPELLGG 416
DB 357 PWMVIANPAGMKQCLLSQGVLESNTKVLPTWSTPVEPKSCDKTHTCPCPAPPELLGG 416
QY 423 P-----SNTKVDKT-----VERKQVVE--CPGPCPAP--VAG 320
DB 423 P-----SNTKVDKT-----VERKQVVE--CPGPCPAP--VAG 320

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QY 417 PSVFLPFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKFNNYVVDGEVHNAAKTRPEEQYN 476
DB 417 PSVFLPFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKFNNYVVDGEVHNAAKTRPEEQYN 476
QY 477 STYRVSVLTVLHODMWNKGEYKCKVSNKALPAPIETKISKAKQPREPPQVYTLPSRDE 536
DB 477 STYRVSVLTVLHODMWNKGEYKCKVSNKALPAPIETKISKAKQPREPPQVYTLPSRDE 536
QY 537 LTRKQVSLTCLVKGFPESDIAVEWESNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRW 596
DB 537 LTRKQVSLTCLVKGFPESDIAVEWESNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRW 596
QY 597 QQGNVFCQSVNHEALHNHYTQKSLSLSPG 625
DB 597 QQGNVFCQSVNHEALHNHYTQKSLSLSPG 625
QY 501 QQGNVFCQSVNHEALHNHYTQKSLSLSPG 529
DB 501 QQGNVFCQSVNHEALHNHYTQKSLSLSPG 529

RESULT 18
AAB67323
ID AAB67323 standard; protein; 530 AA.
AC AAB67323;
XX 23-APR-2001 (first entry)
XX
XX CD4-IgG2 chimeric heavy chain protein.
XX
XX Immunocjugate; chelator; chimeric; HIV; human immunodeficiency virus.
XX
XX Homo sapiens.
XX
XX US6177549-B1.
XX
XX 23-JAN-2001.
XX
XX 10-JUN-1999; 99US-00329916.
XX
XX 07-AUG-1992; 92US-00927931.
XX
XX 06-AUG-1993; 93WO-US007422.
XX
XX 03-FEB-1995; 95US-00379516.
XX
XX 07-JUN-1995; 95US-00477460.
XX
XX (PROG-) PROGENICS PHARM INC.
XX
XX Maddon PJ, Allaway GP.
XX
XX MPI: 2001-158582/16.
XX
XX Immunocjugate for treating human immunodeficiency virus-infected
XX subject, consists of cytotoxic radionuclide linked to heterotrimer
XX comprising two chimeric CD4-IgG2 heavy chains and two chimeric CD4-
XX kappa/light chains.
XX
XX Disclosure: Fig 4; 43pp; English.
XX
XX The present invention relates to an immunocjugate, comprising a
XX cytotoxic radionuclide linked, directly or via a bifunctional chelator,
XX to a heterotrimer having two chimeric CD4-IgG2 heavy chains encoded by
XX an expression vector CD4-IgG2HC-PRCCMV and two chimeric CD4-kappa light
XX chains encoded by an expression vector CD4-KLC-PRCCMV. The invention is
XX useful for killing human immunodeficiency virus (HIV)-infected cells, for
XX the treatment and prevention of infection with HIV
XX
XX Sequence 530 AA;
XX
XX Query Match 63.0%; Score 2151; DB 4; Length 530;
XX Best Local Similarity 70.4%; Pred. No. 1.5e-109;
XX Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;
XX
QY 1 MNRGVPFRHLLVQLALPAAATQGNKVTGKGGDTVELCTTASQKSIQPHMKNNSQIK 60
DB 1 MNRGVPFRHLLVQLALPAAATQGNKVTGKGGDTVELCTTASQKSIQPHMKNNSQIK 60

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QY 61 ILGNQSFLLTKGSPSKLNDRAISRSLMDQGNFPLLIKNIKIEDSDTYICEVEDQKEEYOL 120
    |||||
DB 61 ILGNQSFLLTKGSPSKLNDRAISRSLMDQGNFPLLIKNIKIEDSDTYICEVEDQKEEYOL 120
    |||||

QY 121 LVFGLTANSDTHLLQGGSLTLTLSPGSSPSVOCSPRGKNIQGGKTLVSQLELDQSG 180
    |||||
DB 121 LVFGLTANSDTHLLQGGSLTLTLSPGSSPSVOCSPRGKNIQGGKTLVSQLELDQSG 180
    |||||

QY 181 TWTCTVLQNKQKVEKIDIVLAFAKASSIVYKKEGEVEFSPFLAFYVEKLTGSGELMW 240
    |||||
DB 181 TWTCTVLQNKQKVEKIDIVLAFAKASSIVYKKEGEVEFSPFLAFYVEKLTGSGELMW 240
    |||||

QY 241 QAEARASSKSWITFDLKNKEVSVKRYTOPPKLQMGKKLPLHLTLPOALPOYAG---SGNL 297
    |||||
DB 241 QAEARASSKSWITFDLKNKEVSVKRYTOPPKLQMGKKLPLHLTLPOALPOYAG---SGNL 297
    |||||

QY 298 TLALAKTGKLGHOEYNLVVMRATOL-QKNLTCEVWGPTSPKMLSLKLENKAKVSKREK 356
    |||||
DB 298 TLALAKTGKLGHOEYNLVVMRATOL-QKNLTCEVWGPTSPKMLSLKLENKAKVSKREK 356
    |||||

QY 357 PVMVLPNPAQMGQCLSDSGQVLESNIKVLPTWSTPVPKSCDKTHTCPPCAPPELLQGG 416
    |||||
DB 357 PVMVLPNPAQMGQCLSDSGQVLESNIKVLPTWSTPVPKSCDKTHTCPPCAPPELLQGG 416
    |||||

QY 417 PSVFLPPPKPDITLMSRTPEVTCVVDVSHEDPEYKFMVYDGVVHNAKTKPREBOYN 476
    |||||
DB 417 PSVFLPPPKPDITLMSRTPEVTCVVDVSHEDPEYKFMVYDGVVHNAKTKPREBOYN 476
    |||||

QY 477 STYRVSVLTVLHODMLNGEKYKCVSNKALPAPIEKTISKAKGPREPOVYTLPPSRDE 536
    |||||
DB 477 STYRVSVLTVLHODMLNGEKYKCVSNKALPAPIEKTISKAKGPREPOVYTLPPSRDE 536
    |||||

QY 537 LTKNQVSLTCLVKGFPSPDIWVESNGQPENNYKTPPVLDSDGSFELYSKLTVDKSRW 596
    |||||
DB 537 LTKNQVSLTCLVKGFPSPDIWVESNGQPENNYKTPPVLDSDGSFELYSKLTVDKSRW 596
    |||||

QY 597 OQGNVFCSCVMHEALHNHYTQKSLSLSPG 625
    |||||
DB 597 OQGNVFCSCVMHEALHNHYTQKSLSLSPG 625
    |||||

RESULT 19
AAB80884
ID AAB80884 standard; protein; 530 AA.
AC AAB80884;
DT 29-MAY-2001 (first entry)
DE Human CD4-IgG2 chimeric heavy chain.
KW Human; Anti-HIV; CD4-IgG2 chimeric heterotetramer;
KW Immunoglobulin gamma 2.
OS Homo sapiens.
PN US6187748-B1.
PD 13-FEB-2001.
PE 07-JUN-1995; 95US-00485372.
PR 08-FEB-1991; 91US-00653684.
PR 10-FEB-1992; 92WO-US001143.
PR 08-DEC-1992; 92US-00960440.
PA (PROG-) PROGENICS PHARM INC.
PI Maddon PJ, Beaudry GA;
XX MPI; 2001-264961/27.
DR N-PSDB; AAF77830.

```

XX Inhibiting human immunodeficiency virus (HIV) infection of a CD4+ cell,
 PT or treating a subject having CD4+ cells infected with HIV involves using
 PT CD4-IgG2 chimeric heterotetramer to form a complex with the HIV.

PS Disclosure; Fig 4; 55pp; English.

CC The present invention relates to a method for inhibiting infection of a
 CC CD4+ cell by HIV. The method comprises contacting the HIV with a CD4-IgG2
 CC chimeric heterotetramer to form a complex with the HIV (CD4 = cluster of
 CC differentiation 4; IgG2 = immunoglobulin gamma 2). CD4 is a cell surface
 CC glycoprotein that is expressed primarily on the surface of T cells. In
 CC man, CD4 is the target of interaction with HIV. The heterotetramer has
 CC two heavy and two light chains which are encoded by expression vectors
 CC CD4-IgG2HC-pRCMV (V1) and CD4-kLC-pRCMV (V2), respectively. The method
 CC is used to inhibit infection of a CD4+ cell by a HIV and to prevent CD4+
 CC cells of a subject from becoming infected with HIV. The method is also
 CC useful for treating a subject having CD4+ cells infected with HIV. The
 CC present sequence is human fusion protein: CD4-Ig2 chimeric heavy chain of
 CC the CD4-IgG2 chimeric heterotetramer. This sequence was used in the
 CC method of the present invention

XX Sequence 530 AA;

Query Match 63.0%; Score 2151; DB 4; Length 530;

Best Local Similarity 70.4%; Pred. No. 1.5e-109; Mismatches 104; Gaps 11;

Matches 443; Conservative 26; Indels 104; Gaps 11;

```

QY 1 MNRGVPFHHLLLVIALPAPATQGNKVLGKGGDTVELTGTASQKSIQFHMKNNOIK 60
    |||||
DB 1 MNRGVPFHHLLLVIALPAPATQGNKVLGKGGDTVELTGTASQKSIQFHMKNNOIK 60
    |||||

QY 61 ILGNQSFLLTKGSPSKLNDRAISRSLMDQGNFPLLIKNIKIEDSDTYICEVEDQKEEYOL 120
    |||||
DB 61 ILGNQSFLLTKGSPSKLNDRAISRSLMDQGNFPLLIKNIKIEDSDTYICEVEDQKEEYOL 120
    |||||

QY 121 LVFGLTANSDTHLLQGGSLTLTLSPGSSPSVOCSPRGKNIQGGKTLVSQLELDQSG 180
    |||||
DB 121 LVFGLTANSDTHLLQGGSLTLTLSPGSSPSVOCSPRGKNIQGGKTLVSQLELDQSG 180
    |||||

QY 181 TWTCTVLQNKQKVEKIDIVLAFAKASSIVYKKEGEVEFSPFLAFYVEKLTGSGELMW 240
    |||||
DB 181 TWTCTVLQNKQKVEKIDIVLAFAKASSIVYKKEGEVEFSPFLAFYVEKLTGSGELMW 240
    |||||

QY 241 QAEARASSKSWITFDLKNKEVSVKRYTOPPKLQMGKKLPLHLTLPOALPOYAG---SGNL 297
    |||||
DB 241 QAEARASSKSWITFDLKNKEVSVKRYTOPPKLQMGKKLPLHLTLPOALPOYAG---SGNL 297
    |||||

QY 298 TLALAKTGKLGHOEYNLVVMRATOL-QKNLTCEVWGPTSPKMLSLKLENKAKVSKREK 356
    |||||
DB 298 TLALAKTGKLGHOEYNLVVMRATOL-QKNLTCEVWGPTSPKMLSLKLENKAKVSKREK 356
    |||||

QY 357 PVMVLPNPAQMGQCLSDSGQVLESNIKVLPTWSTPVPKSCDKTHTCPPCAPPELLQGG 416
    |||||
DB 357 PVMVLPNPAQMGQCLSDSGQVLESNIKVLPTWSTPVPKSCDKTHTCPPCAPPELLQGG 416
    |||||

QY 417 PSVFLPPPKPDITLMSRTPEVTCVVDVSHEDPEYKFMVYDGVVHNAKTKPREBOYN 476
    |||||
DB 417 PSVFLPPPKPDITLMSRTPEVTCVVDVSHEDPEYKFMVYDGVVHNAKTKPREBOYN 476
    |||||

QY 477 STYRVSVLTVLHODMLNGEKYKCVSNKALPAPIEKTISKAKGPREPOVYTLPPSRDE 536
    |||||
DB 477 STYRVSVLTVLHODMLNGEKYKCVSNKALPAPIEKTISKAKGPREPOVYTLPPSRDE 536
    |||||

QY 537 LTKNQVSLTCLVKGFPSPDIWVESNGQPENNYKTPPVLDSDGSFELYSKLTVDKSRW 596
    |||||
DB 537 LTKNQVSLTCLVKGFPSPDIWVESNGQPENNYKTPPVLDSDGSFELYSKLTVDKSRW 596
    |||||

QY 597 OQGNVFCSCVMHEALHNHYTQKSLSLSPG 625
    |||||
DB 597 OQGNVFCSCVMHEALHNHYTQKSLSLSPG 625
    |||||

```

```

RESULT 20
ABG71123
ID   ABG71123 standard; protein; 530 AA.
XX
XX   ABG71123;
AC
XX   17-JAN-2003 (first entry)
DT
XX
XX   CD4-immunoglobulin G2 (IgG2) chimeric heterotetramer.
DE
XX
XX   CD4-immunoglobulin G2; Ig gamma2; human immunodeficiency virus-1; HIV-1;
KM   mutant; mtein.
XX
XX   Homo sapiens.
OS
XX   Synthetic.
XX
XX   Key               Location/Qualifiers
FH   Peptide           1..25
FT   /label= Signal_peptide
FT   Protein           26..530
FT   /note= "Mature CD4-IgG2 chimeric heterotetramer"
XX
XX   US6451313-B1.
XX
XX   17-SEP-2002.
XX
XX   07-JUN-1995; 95US-00484681.
XX
XX   08-FEB-1991; 91US-00653684.
XX   10-FEB-1992; 92MO-US001143.
XX   08-DEC-1992; 92US-00960440.
XX
XX   (PROG-) PROGENICS PHARM INC.
XX
XX   Maddon PJ, Beaudry GA;
XX
XX   WPI; 2003-038273/03.
XX   N-PSDB; A855721.
XX
XX   Novel CD4-immunoglobulin G2 chimeric heterotetramer neutralizes human
XX   immunodeficiency virus-1 with two heavy and light chains encoded by
XX   expression vectors designated CD4-IgG2HC-PRCCMV and CD4-KLC-PRCCMV,
XX   respectively.
XX
XX   Claim 1; Fig 4A-H; 54pp; English.
XX
XX   The invention describes a purified CD4-immunoglobulin (Ig)G2 chimeric
XX   heterotetramer (I) that neutralises human immunodeficiency virus-1 (HIV-
XX   1) having two heavy chains encoded by an expression vector designated CD4
XX   -IgG2HC-PRCCMV, and two light chains encoded by expression vector
XX   designated CD4-KLC-PRCCMV. (I) and a composition (II) comprising (I) or
XX   (I) linked to a toxin, are useful for inhibiting HIV infection of a CD4
XX   cell, and preventing a subject being infected with HIV by blocking the
XX   spread of HIV infection. This is the amino acid sequence of the CD4-
XX   immunoglobulin G2 chimeric heavy chain chimeric heterotetramer useful in
XX   inhibiting HIV infection
XX
XX   Sequence 530 AA;
SQ
Query Match      63.0%; Score 2151; DB 6; Length 530;
Best Local Similarity 70.4%; Pred. No. 1.5e-109;
Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;
QY   1 MNRGVFPHLLVLTQALLPAATQGNKVVLGKGGDTVELTCTASQKSIQFHMKNSNQIK 60
DB   1 MNRGVFPHLLVLTQALLPAATQGNKVVLGKGGDTVELTCTASQKSIQFHMKNSNQIK 60
QY   61 ILGNQGSFLTKGPSKLANDRASRSRLMDQGNFPLIKLKLTEDSDTYICEVEDQKEEYQL 120
DB   61 ILGNQGSFLTKGPSKLANDRASRSRLMDQGNFPLIKLKLTEDSDTYICEVEDQKEEYQL 120
QY   121 LVFGLTANSDTHTLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB   121 LVFGLTANSDTHTLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180

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DB   121 LVFGLTANSDTHTLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY   181 TWICTVLQNKQKVEFKIDIVLAFQKASIVYKKEGQVEFSPPLAFTVEXTLTSGGELMW 240
DB   181 TWICTVLQNKQKVEFKIDIVLAF--AST-----KQSV---FPLA----- 216
QY   241 QAERASSKSMITFDLKNKEVSRYVTQDPKLOMGKYLPHLTLPQALPOYAG--SGNL 297
DB   217 -----PCSRSTSESTAALGCLVKDYFPEPVTVMNSGALTSQVH 255
QY   298 TLAEATKGLHQEVNLVVMKATQL-QKNTLCEVWGSTSKMLSLTKENKAENVSGREK 356
DB   256 TFPALVQSSGLYSLSVYTVPPSSNFGTYTCNV-----DHK 292
QY   357 PWWVLNPEAGWMOCLLSDSGVLLSESNIKYLPRTWSTVEPKSCDKHTCPCPAPELLGG 416
DB   293 P-----SNTKYDKT-----VERKCYE---CPPCPAP-VAG 320
QY   417 PSVFLFPPKPKDITMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYN 476
DB   321 PSVFLFPPKPKDITMISRTPEVTCVVVDVSHEDPEVQFMWYVDGVEVHNAKTKPREEQFN 380
QY   477 STYRVSVLTIVLQDMLNGEKYCKVKSNKALPAPIETKISKAKQPREPOVYTLPPSRDE 536
DB   381 STFRVSVLTIVVHQDMLNGEKYCKVKSNKGLPAPIETKISKAKQPREPOVYTLPPSRDE 440
QY   537 LTRKQVSLTCLVKGFPYSDIAVENESNGQPENNYKTPPVLDSDGSPFLYSKLTVDKSRW 596
DB   441 MTKKQVSLTCLVKGFPYSDIAVENESNGQPENNYKTPPVLDSDGSPFLYSKLTVDKSRW 500
QY   597 QQGNVFSQSVMEALHNHYTQKSLSLSPG 625
DB   501 QQGNVFSQSVMEALHNHYTQKSLSLSPG 529

RESULT 21
AAR46679
ID   AAR46679 standard; protein; 530 AA.
XX
XX   AAR46679;
AC
XX   25-MAR-2003 (revised)
DT   08-AUG-1994 (first entry)
XX
XX   CD4-IgG2 chimeric heavy chain.
XX
XX   CD4; gamma; heavy chain; chimeric; chimaeic; immunoconjugate; HIV;
XX   human immunodeficiency virus; radionuclide; toxin; therapy; treatment;
XX   imaging; detection; targeting; immunoglobulin; IgG.
XX
XX   Homo sapiens.
XX
XX   Key               Location/Qualifiers
FH   Key               1..204
FT   Region           /label= CD4 Region.
FT   Region           205..302
FT   Region           /label= CH1 Region.
FT   Region           303..314
FT   Region           /label= Hinge Region.
FT   Region           315..423
FT   Region           /label= CH2 Region.
FT   Region           424..530
FT   Region           /label= CH3 Region.
XX
XX   MO9403191-A1.
XX
XX   17-FEB-1994.
XX
XX   06-AUG-1993; 93MO-US007422.
XX
XX   07-AUG-1992; 92US-00927931.
XX
XX   (PROG-) PROGENICS PHARM INC.

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XX Allaway GP, Maddon PJ;
 PI
 DR WPI: 1994-065392/08.
 DR N-PSDB; AAQ55751.
 XX
 PT Non-peptidyl toxin or radionuclide and CD4-gamma 2 or CD4-IgG2
 PT immunoconjugates - used to kill HIV-infected cells and to image and
 PT stage HIV infection.
 XX
 PS Disclosure; Fig 4; 142pp; English.
 XX
 CC A tetramer comprising 2 IgG2 heavy chains or two CD4-IgG2 chimeric heavy
 CC chains and two kappa light chains or CD4-kappa light chains (AA046680)
 CC linked to a non-peptidyl toxin or a gamma radiation-emitting radionuclide
 CC of low to moderate cytotoxicity. The resulting immunconjugate comprising
 CC the toxin can be used to kill HIV infected cells and to treat HIV
 CC infected subjects to reduce the population of HIV infected cells. It can
 CC also be used to reduce the likelihood of infection. The immunconjugate
 CC comprising the radionuclide can be used to image HIV infected tissue, to
 CC calculate the stage of HIV infection or the efficacy of an anti-HIV
 CC treatment using the imaging technique and for determining the prognosis
 CC of an HIV infected subject. (Updated on 25-Mar-2003 to correct PN field.)
 CC
 XX
 SQ Sequence 530 AA;

Query Match 62.7%; Score 2141; DB 2; Length 530;
 Best Local Similarity 70.0%; Pred. No. 5.4e-109;
 Matches 440; Conservative 29; Mismatches 56; Indels 104; Gaps 11;

QY 1 MNRGVFPHLLVLTQALLPAATQGNKVVLGKKGDVTELTCTASQKSIQFHMKNNOIK 60
 DB 1 MNRGVFPHLLVLTQALLPAATQGNKVVLGKKGDVTELTCTASQKSIQFHMKNNOIK 60
 QY 61 ILGNQSFPLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYOL 120
 DB 61 ILGNRGSFLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYOL 120
 QY 121 LVEGLTANSDTHLLOQSLTLTLESPGSSPVQCSPPGKNIQGSKTSVSLQLEIDSG 180
 DB 121 LVEGLTANSDTHLLOQSLTLTLESPGSSPVQCSPPGKNIQGSKTSVSLQLEIDSG 180
 QY 181 TWTCTVLQNGKVEFKIDIVLAFQKASISIVKKEGEQVEFSPFLFTVEKLTGSGELMW 240
 DB 181 TWTCTVLQNGKVEFKIDIVLAF--AST-----KQPSV---PPLA----- 216
 QY 241 QAERASSSKSWITFDLKNKEVSVKRVYTOPDKLQMGKKLPPLHLTLPPALPQYAG--SGNL 297
 DB 217 -----PCSRSTSESTALGCLVNDYFPEPYTVSMNSGALTSGVH 255
 QY 298 TLALAKTGLHQBVLVYMRATQL-QKULTCEVMGPTSPKMLSLKLENKAKVSKREK 356
 DB 256 TTPAVLQSSGLYSLSVVTVPSSNFQTQYTCNV-----DHK 292
 QY 357 PVVAVLPEAGMQCLSDSGOVLLESNIKVLPTWSTPVEPKSCDTHHTPCPPAPLADG 416
 DB 293 P-----SNTKVDKT-----VERKCVF---CPPCARP-VAG 320
 QY 417 PSVFLFPPPKRQDTLMSRTEPVTQVVDVSHEDPEVKFMWYDGVENVHNAKTKPREEOYN 476
 DB 321 PSVFLFPPPKRQDTLMSRTEPVTQVVDVSHEDPEVKFMWYDGVENVHNAKTKPREEOFN 380
 QY 477 STRRVSVLTVLHODMLNGKEYKCKVSNKALPARIKITSKAGOREPOVYTLPPSRDE 536
 DB 381 STRRVSVLTVLHODMLNGKQYCKVSNKGLPARIKITSKAGOREPOVYTLPPSRDE 440
 QY 537 LTRQVSLTCLVGFYPSDIAVEMESNGOPENNYKTTTPVLDSDGSFFLYSKLTLYVXSM 596
 DB 441 MTRNQSLTCLVGFYPSDIAVEMESNGOPENNYKTTTPVLDSDGSFFLYSKLTLYVXSM 500
 QY 597 QQGNVFCSVMEALHNHYTQKSLSPG 625
 DB 501 QQGNVFCSVMEALHNHYTQKSLSPG 529

RESULT 22
 AA037576
 ID AA037576 standard; protein; 449 AA.
 XX
 XX AA037576;
 AC
 XX
 XX 27-AUG-2003 (first entry)
 DT
 XX
 DE Human FD1D2-Ig alphatp fusion protein variant.
 XX
 XX Human; CD4; cluster of differentiation factor 4; immunoglobulin; Ig;
 KW human immunodeficiency virus; gene therapy; vaccine; HIV-1 infection; D1;
 KW D2; alpha tailpiece; alphatp; fusion protein; mutein; variant; mutant.
 XX
 OS Homo sapiens.
 XX
 XX Key Location/Qualifiers
 FH Misc-difference 218
 FT /note= "wild type Glu substituted with Pro"
 FT Misc-difference 219
 FT /note= "wild type Leu substituted with Val"
 FT Misc-difference 221
 FT /note= "wild type Gly substituted with Ala"
 FT
 XX
 PN W02003040311-A2.
 XX
 XX 15-MAY-2003.
 PD
 XX 24-OCT-2002; 2002WO-US034393.
 PF
 XX 25-OCT-2001; 2001US-0346231P.
 PR
 XX (USSH) US DEPT HEALTH & HUMAN SERVICES.
 PA Arthos J, Cicala C, Fauci AS;
 PI
 XX
 DR WPI: 2003-441545/41.
 DR N-PSDB; ACC82877.
 XX
 XX New CD4 polypeptide ligated at its C-terminus with a portion of an
 PT immunoglobulin, useful for preparing a composition for treating or
 PT preventing HIV-1 infection.
 PT
 XX
 XX Example 11; Page 67; 100pp; English.
 PS
 CC The invention relates to a CD4 (cluster of differentiation factor 4)
 CC polypeptide ligated at its C-terminus with a portion of an immunoglobulin
 CC (Ig) comprising a hinge region and a constant domain of a mammalian Ig
 CC heavy chain. The polypeptide comprises a tailpiece from the C-terminus of
 CC the heavy chain of an IgA or IgM antibody. Polypeptides of the invention
 CC are useful for preparing a composition for treating or preventing human
 CC immunodeficiency virus (HIV)-1 infection. The invention is useful in gene
 CC therapy and also in the preparation of vaccines. The present sequence is
 CC a fusion protein variant (G219P/L219V/220delA/G221A) which comprises a
 CC human IgA alpha tailpiece (alphatp), a human IgG2 constant region
 CC completing a hinge, a CH2 and CH3 region and a human CD4 D1D2 domain.
 CC This variant protein is also referred to as mutant P
 CC
 XX
 SQ Sequence 449 AA;

Query Match 62.3%; Score 2127; DB 6; Length 449;
 Best Local Similarity 66.4%; Pred. No. 2.6e-108;
 Matches 427; Conservative 3; Mismatches 7; Indels 206; Gaps 3;

QY 1 MNRGVFPHLLVLTQALLPAATQGNKVVLGKKGDVTELTCTASQKSIQFHMKNNOIK 60
 DB 1 MNRGVFPHLLVLTQALLPAATQGNKVVLGKKGDVTELTCTASQKSIQFHMKNNOIK 60
 QY 61 ILGNQSFPLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYOL 120
 DB 61 ILGNQSFPLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYOL 120

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QY 121 LVFGLTANSDTHLQGGSLTTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLQGGSLTTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNGQKVEFKIDIVLAFQKASSIVYKKGEQVRSFPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLQNGQKVEFKIDIVLAFQKASSIVYKKGEQVRSFPLAFTVEKLTGSGELMW 240
QY 241 QAEKASSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOLPOYAGSGNLTLA 300
DB 241 QAEKASSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOLPOYAGSGNLTLA 300
QY 204 ----- 203
QY 301 LEAKTGLHQEVNLVWMRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPYWV 360
DB 204 ----- 203
QY 361 LNPBAGMMOCLSDSGVLLSNIKVLPTWSTPVEPKSCDKTHTPCPCPAPBELLGSPSVF 420
DB 204 -----SADKTHTCPCPCPAPB-VAGPSVF 225
QY 421 LPPPKPDITLMSRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVNAKTKPREEOYNSTYR 480
DB 226 LPPPKPDITLMSRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVNAKTKPREEOYNSTYR 285
QY 481 VVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISSAKGQPREPOVYTLPPSRDELTKN 540
DB 286 VVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISSAKGQPREPOVYTLPPSRDELTKN 345
QY 541 QVSLTCLVKGFPYSDIAVEMESNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMWOQGN 600
DB 346 QVSLTCLVKGFPYSDIAVEMESNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMWOQGN 405
QY 601 VFSCSVMEHALHNHYTKSLSLSPG-----LQDENTC 632
DB 406 VFSCSVMEHALHNHYTKSLSLSAGKPTHVNVSVMAEVDGTC 448

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RESULT 23
AAR26782
ID AAR26782 standard; protein; 432 AA.
XX
AC AAR26782;
XX
DT 24-OCT-2003 (revised)
DT 25-MAR-2003 (revised)
DT 06-FEB-1993 (first entry)
XX
DE CD4-gamma2 chimeric heavy chain homodimer.
XX
KM homodimer; soluble CD4; T cell receptor; CD4 antigen; high recovery;
KM chimeric; increased serum half life; HIV infection; AIDS; ss.
XX
OS Homo sapiens.
OS Chimeric.
XX
FH Key 1. 216
FH Domain /label= CD4
FT Domain 217..325
FT /label= CH2
FT 326..433
FT /label= CH3
XX
PN MO9213947-A1.
XX
PD 20-AUG-1992.
XX
PF 10-FEB-1992; 92MO-US001143.
XX
PR 08-FEB-1991; 91US-00653684.
XX
PA (PROG-) PROGENICS PHARM INC.

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XX
PI Beaudry GA, Maddon PJ;
XX
DR WPI: 1992-300034/36.
XX
DR N-PSDB: AAQ28088.
XX
PT CD4-gamma-2 and CD4-IgG2 chimera(s) and expression vectors - for
PT treatment, prevention and diagnosis of HIV infection.
XX
PS Claim 2; Fig 3; 90pp; English.
XX
CC This sequence represents a CD4-gamma2 chimeric heavy chain homodimer. It
CC was produced by expression of the coding multigenised cDNA (produced as
CC described in AAQ28088) in Dhfr-CHO cells. The protein is efficiently
CC assembled intracellularly and effectively secreted from mammalian cells
CC pref. CHO, COS, or myeloma cells as a homodimer, enabling high recovery
CC and purification from the medium of cells expressing it. It possesses
CC increased serum half-life and has increased avidity for HIV cf. heavy
CC chain dimers. It can inhibit HIV infection of CD4+ cells and block the
CC spread of HIV infection within a patient. Attachment to a detectable
CC marker makes it useful in an assay for HIV or SIV infection, and it can
CC also be linked to toxins, eg diphtheria, pseudomonas exotoxin A (domains
CC I or II) or the deglycosylated A-chain of ricin. (updated on 25-MAR-2003
CC to correct FN field.) (Updated on 24-OCT-2003 to standardise OS field)
XX
SQ Sequence 432 AA;

```

Query Match 60.8%; Score 2077; DB 2; Length 432;

Best Local Similarity 66.1%; Pred. NO. 1.4e-105; Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

```

QY 1 MNRGVPFRHLHLVQLALPLPATQGNKVLGKGDVTELTCTASQKKSIOFHMWNSNOIK 60
DB 1 MNRGVPFRHLHLVQLALPLPATQGNKVLGKGDVTELTCTASQKKSIOFHMWNSNOIK 60
QY 61 ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEVOL 120
DB 61 ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEVOL 120
QY 121 LVFGLTANSDTHLQGGSLTTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLQGGSLTTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNGQKVEFKIDIVLAFQKASSIVYKKGEQVRSFPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLQNGQKVEFKIDIVLAFQKASSIVYKKGEQVRSFPLAFTVEKLTGSGELMW 240
QY 241 QAEKASSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOLPOYAGSGNLTLA 300
DB 241 QAEKASSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOLPOYAGSGNLTLA 300
QY 207 ----- 206
QY 301 LEAKTGLHQEVNLVWMRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPYWV 360
DB 207 ----- 206
QY 361 LNPBAGMMOCLSDSGVLLSNIKVLPTWSTPVEPKSCDKTHTPCPCPAPBELLGSPSVF 420
DB 207 -----KCCVPE--CPCPCPAP-VAGPSVF 226
QY 421 LPPPKPDITLMSRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVNAKTKPREEOYNSTYR 480
DB 227 LPPPKPDITLMSRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVNAKTKPREEOYNSTYR 286
QY 481 VVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISSAKGQPREPOVYTLPPSRDELTKN 540
DB 287 VVSVLTVLHODWLNKGEYKCKVSNKALPAPIEKTISSAKGQPREPOVYTLPPSRDELTKN 346
QY 541 QVSLTCLVKGFPYSDIAVEMESNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMWOQGN 600
DB 347 QVSLTCLVKGFPYSDIAVEMESNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMWOQGN 406
QY 601 VFSCSVMEHALHNHYTKSLSLSPG 625

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Db 407 VFSCSVMEHALHNHYTKSLSPG 431

RESULT 24

AA46678 standard; protein; 432 AA.

AA46678;

AC 25-MAR-2003 (revised)

DT 08-AUG-1994 (first entry)

DE CD4-gamma 2 chimeric heavy chain.

XX

XX CD4; gamma; heavy chain; chimeric; chimeric; immunconjugate; HIV;

KM human immunodeficiency virus; radionuclide; toxin; therapy; treatment;

XX imaging; detection; targeting.

XX

OS Homo sapiens.

XX

FH Key Location/Qualifiers

FT Region 1..204

FT Region /label= CD4 Region.

FT Region 205..216

FT Region /label= Hinge Region.

FT Region 217..325

FT Region /label= CH2 Region.

FT Region 326..432

FT Region /label= CH3 Region.

XX

XX MO9403191-A1.

XX

PD 17-FEB-1994.

XX

PF 06-AUG-1993; 93WO-US007422.

XX

PR 07-AUG-1992; 92US-00927931.

XX

XX (PROG-) PROGENICS PHARM INC.

XX

PI Allaway GP, Maddon PJ;

XX

DR WPI; 1994-065392/08.

XX

DR N-PSDB; AA057750.

XX

PT Non-peptidyl toxin or radionuclide and CD4-gamma 2 or CD4-IgG2

PT immunoconjugates - used to kill HIV-infected cells and to image and

PT stage HIV infection.

XX

XX

PS Disclosure; Fig 3; 142pp; English.

XX

XX A CD4-gamma 2 chimeric heavy chain homodimer is linked to a non-peptidyl

XX toxin or a gamma radiation-emitting radionuclide of low to moderate

XX cytotoxicity. The resulting immunconjugate comprising the toxin can be

XX used to kill HIV infected cells and to treat HIV infected subjects to

XX reduce the population of HIV infected cells. It can also be used to

XX reduce the likelihood of infection. The immunconjugate comprising the

XX radionuclide can be used to image HIV infected tissue, to calculate the

XX stage of HIV infection or the efficacy of an anti-HIV treatment using the

XX imaging technique and for determining the prognosis of an HIV infected

XX subject. (Updated on 25-MAR-2003 to correct PN field.)

XX

XX Sequence 432 AA;

XX

Query Match 60.8%; Score 2077; DB 2; Length 432;

Best Local Similarity 66.1%; Pred. No. 1,4e-105;

Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

QY 1 MNRGVPRRLILVLOALPAATQGNKVVIGKKGDTVELTCTASQKKSIQFHWKNSNOIK 60

DB 1 MNRGVPRRLILVLOALPAATQGNKVVIGKKGDTVELTCTASQKKSIQFHWKNSNOIK 60

QY 61 ILGNQGSFLTKGSPSKLNDRADRSRLMDQGNPLIILKILKIEDSDTYICEVEDQKEEYQL 120

Db 61 ILGNQGSFLTKGSPSKLNDRADRSRLMDQGNPLIILKILKIEDSDTYICEVEDQKEEYQL 120

QY 121 LVFGITANSPTHLLOGOSITLTLESPGSSPSPVQCRSRGNKIQGKTLVSQLELDQSG 180

DB 121 LVFGITANSPTHLLOGOSITLTLESPGSSPSPVQCRSRGNKIQGKTLVSQLELDQSG 180

QY 181 TWTCTVLQNKQKVEERKIDIVLAFQKASSIYVKKEGEQVEFSFLAFTVETKLTGSGELMW 240

DB 181 TWTCTVLQNKQKVEERKIDIVLAFER----- 206

QY 241 QAERASSSKSWITFDLKNKEVSVKRVTPDKLQMGKULPLHLTLPOALPOVAGSGLTLA 300

DB 207 ----- 206

QY 301 LEAKTGKLEHGVNLVYMRATOLQKLTCEVWGPTSPKMLSLKENKAUKSKREKPVW 360

DB 207 ----- 206

QY 361 LNPEAGMGCCLSDSGOVLBSNIVLPTWSTPVEPKSCDKHTPCPCPAPELDGSPV 420

DB 207 -----KCCVE---CPCPAPV-VAGPSVF 226

QY 421 LFPKPKDTLMSRTPVYTCVVVDVSHEDPEVKFMVYDGVENNAKTKPREEQYNSTYR 480

DB 227 LFPKPKDTLMSRTPVYTCVVVDVSHEDPEVKFMVYDGVENNAKTKPREEQYNSTYR 286

QY 481 VVSIVTLVTHQDWLNGEKYCKVSNKALPAPLEKTSISKAGQPREQVYTLPPSRDELTKN 540

DB 287 VVSIVTLVTHQDWLNGEKYCKVSNKALPAPLEKTSISKAGQPREQVYTLPPSRDELTKN 346

QY 541 QVSLTCLVKGFPSPDIAVWESNGQPENNYKTPPVLSDSGFFLYSKLTVNKSWMQGN 600

DB 347 QVSLTCLVKGFPSPDIAVWESNGQPENNYKTPPVLSDSGFFLYSKLTVNKSWMQGN 406

QY 601 VFSCSVMEHALHNHYTKSLSPG 625

DB 407 VFSCSVMEHALHNHYTKSLSPG 431

RESULT 25

AA485079

ID AA485079 standard; protein; 432 AA.

XX

XX AA485079;

XX

AC 19-JUN-2000 (first entry)

XX

DT

XX

DE Human CD4-gamma 2 chimeric heavy chain homodimer amino acid sequence.

XX

XX CD4-gamma 2 chimeric heavy chain homodimer; immunconjugate; treatment;

KM cytotoxic radionuclide; cell surface glycoprotein; prevent; infection;

KM cellular immune response interaction mediator; HIV interaction; staging;

KM prognosis; envelope glycoprotein burden; human.

XX

OS Homo sapiens.

XX

XX US6034223-A.

PN 07-MAR-2000.

XX

PD

XX

PF 07-JUN-1995; 95US-00477460.

XX

XX

PR 07-AUG-1992; 92US-00927931.

XX

PR 06-AUG-1993; 93WO-US007422.

XX

PR 03-FEB-1995; 95US-00379516.

XX

PA (PROG-) PROGENICS PHARM INC.

XX

PI Allaway GP, Maddon PJ;

XX

DR WPI; 2000-269502/23.

DR N-PSDB; AA298855.

XX New immunoglobulin, used to treat, prevent or image human immune
 PT deficiency virus infection, comprises radionuclide attached to
 PT heterotetramer of CD4-immunoglobulin chimeras.

XX Disclousure; Fig 3, 58pp; English.

CC This sequence represents the human CD4-gamma 2 chimeric heavy chain
 CC homodimer amino acid sequence. The invention relates to a
 CC immunoglobulin comprising a cytotoxic radionuclide and a heterotetramer
 CC of two heavy chains and two light chains. The cytotoxic radionuclide is
 CC linked to either the heavy chains or the light chains, or to all four
 CC chains, directly or through a bifunctional chelator. Both heavy chains
 CC are chimeric CD4-Ig (immunoglobulin) G2 chains encoded by vector CD4-
 CC IgG2HC-PRCMMV (ATCC 75193) and both light chains are chimeric CD4-kappa
 CC chains encoded by vector CD4-kLC-PRCMMV (ATCC 75194). CD4 is a non-
 CC polymorphic cell surface glycoprotein that is expressed on the surface of
 CC helper T lymphocytes, cells of the monocyte/macrophage lineage and
 CC dendritic cells. CD4 associates with major histocompatibility complex
 CC (MHC) class II molecules on the surface of antigen presenting cells to
 CC mediate efficient cellular immune response interactions. In humans CD4 is
 CC the target of interaction with the human immunodeficiency virus HIV. The
 CC immunoglobulin is used to kill cells infected with HIV, and for treating
 CC or preventing infection. It is also used for imaging HIV-infected tissues
 CC (for staging or prognosis of infection, and for assessing efficacy of
 CC treatments). The immunoglobulin is also used to determine the HIV
 CC envelope glycoprotein burden, once determined, this information is used
 CC in the staging and prognosis of HIV infected patients. The
 CC immunoglobulin should be active against all strains of HIV (since the
 CC CD4-gp120 interaction is essential for infection). The heterotetramers
 CC are assembled intracellularly and secreted efficiently from mammalian
 CC cells, allowing high recovery and purification from the culture medium.
 CC They have longer half-life in serum and greater avidity than heavy chain
 CC dimers

XX Sequence 432 AA;

Query Match 60.8%; Score 2077; DB 3; Length 432;
 Best Local Similarity 66.1%; Pred. No. 1.4e-105;
 Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

QY 1 MNRGVPFRHLLVLTQALLPAATQGNKVLGKGDVLTCTASQKSIQFHMKNNOIK 60
 DB 1 MNRGVPFRHLLVLTQALLPAATQGNKVLGKGDVLTCTASQKSIQFHMKNNOIK 60
 QY 61 ILNGGSEFLTKGSPKLNDRADSRSLMDQGNPFLIKLKIEDSDTYICEVEDQKEEVQL 120
 DB 61 ILNGGSEFLTKGSPKLNDRADSRSLMDQGNPFLIKLKIEDSDTYICEVEDQKEEVQL 120
 QY 121 LVFGILTANSDFHTLLOGSILTLTLESPGSSPSVQCRSPRGKNIQSGKTLVSQLELQDSG 180
 DB 121 LVFGILTANSDFHTLLOGSILTLTLESPGSSPSVQCRSPRGKNIQSGKTLVSQLELQDSG 180
 QY 181 TWTCVTLONOKKVEFKIDIVLAFQKASSIYKKEGEVEFSPLAFTVEKLTGSGELMW 240
 DB 181 TWTCVTLONOKKVEFKIDIVLAFQKASSIYKKEGEVEFSPLAFTVEKLTGSGELMW 240
 QY 241 QAERASSSKSWTTPPLKNKEVSVKRVTDPKLQWQKPLPHLTLPLQALPOYAGSGNLTLA 300
 DB 241 QAERASSSKSWTTPPLKNKEVSVKRVTDPKLQWQKPLPHLTLPLQALPOYAGSGNLTLA 300
 QY 301 LEAKTGKLEHVNVLVVRATOLQKNLTCEVWGPTSPKLMLSIKLENKAKVSKREKPYWV 360
 DB 301 LEAKTGKLEHVNVLVVRATOLQKNLTCEVWGPTSPKLMLSIKLENKAKVSKREKPYWV 360
 QY 361 LNPEAGMOCCLSDSGVLLNESNIVLPTWSTPVEPKSCDKTHITCPCPAPPELLGSPSVF 420
 DB 361 LNPEAGMOCCLSDSGVLLNESNIVLPTWSTPVEPKSCDKTHITCPCPAPPELLGSPSVF 420
 QY 421 LFPKPKDTLMSRTPEVTVVVDVSHDPEKFNWYDGVVHNAAKTKRPEEQNSYR 480
 DB 421 LFPKPKDTLMSRTPEVTVVVDVSHDPEKFNWYDGVVHNAAKTKRPEEQNSYR 480
 QY 227 LFPKPKDTLMSRTPEVTVVVDVSHDPEKFNWYDGVVHNAAKTKRPEEQNSTFR 286
 DB 227 LFPKPKDTLMSRTPEVTVVVDVSHDPEKFNWYDGVVHNAAKTKRPEEQNSTFR 286

QY 481 VWSVLTVLHODWLNKGEKCKVSNKALPAIEKTIKSAKQPRBPQVYTLPPSDELTKN 540
 DB 287 VWSVLTVLHODWLNKGEKCKVSNKALPAIEKTIKSAKQPRBPQVYTLPPSDELTKN 540
 QY 541 QVSLTCLVKGFPYPSDIAVWESNGQPENNYKTPPVLDSDGSPFLYSKLTVDKSRMOGN 600
 DB 347 QVSLTCLVKGFPYPSDIAVWESNGQPENNYKTPPVLDSDGSPFLYSKLTVDKSRMOGN 600
 QY 601 VFSCVMEALHNNHYTOKSLSLSPG 625
 DB 407 VFSCVMEALHNNHYTOKSLSLSPG 431

RESULT 26
 AAB67322
 ID AAB67322 standard; protein; 432 AA.

XX AAB67322;
 AC 23-APR-2001 (first entry)
 DT 23-APR-2001 (first entry)
 XX CD4-gamma2 chimeric heavy chain homodimer protein.

XX Immunoglobulin; chelator; chimeric; HIV; human immunodeficiency virus.
 KW Homo sapiens.

XX US6177549-B1.

XX 10-JUN-1999; 99US-00329916.

XX 07-AUG-1992; 92US-00927931.

XX 06-AUG-1993; 93MO-US007422.

XX 03-FEB-1995; 95US-00379516.

XX 07-JUN-1995; 95US-00477460.

XX (PROG-) PROGNOSIS PHARM INC.

XX Maddon PJ, Alleyway GP;

XX WPI; 2001-158582/16.

PT Immunoglobulin for treating human immunodeficiency virus-infected
 PT subject, comprises of cytotoxic radionuclide linked to heterotetramer
 PT comprising two chimeric CD4-IgG2 heavy chains and two chimeric CD4-
 PT kappa/light chains.

XX Disclousure; Fig 3; 43pp; English.

CC The present invention relates to an immunoglobulin, comprising a
 CC cytotoxic radionuclide linked, directly or via a bifunctional chelator,
 CC to a heterotetramer having two chimeric CD4-IgG2 heavy chains encoded by
 CC an expression vector CD4-IgG2HC-PRCMMV and two chimeric CD4-kappa light
 CC chains encoded by an expression vector CD4-kLC-PRCMMV. The invention is
 CC useful for killing human immunodeficiency virus (HIV)-infected cells, for
 CC the treatment and prevention of infection with HIV

XX Sequence 432 AA;

Query Match 60.8%; Score 2077; DB 4; Length 432;
 Best Local Similarity 66.1%; Pred. No. 1.4e-105;
 Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

QY 1 MNRGVPFRHLLVLTQALLPAATQGNKVLGKGDVLTCTASQKSIQFHMKNNOIK 60
 DB 1 MNRGVPFRHLLVLTQALLPAATQGNKVLGKGDVLTCTASQKSIQFHMKNNOIK 60
 QY 61 ILNGGSEFLTKGSPKLNDRADSRSLMDQGNPFLIKLKIEDSDTYICEVEDQKEEVQL 120
 DB 61 ILNGGSEFLTKGSPKLNDRADSRSLMDQGNPFLIKLKIEDSDTYICEVEDQKEEVQL 120

```

QY 121 LVFGLTANSDTHLLOQSLTLTLESPPGSSPVOCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDTHLLOQSLTLTLESPPGSSPVOCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCTVLQNOKKVEFKIDIVLAFOKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLQNOKKVEFKIDIVLAFOKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 240
QY 241 QAEKASSSKSWITFDLQKKEVSVKRTQDPKLOMGKKLPLHLTLPOALPOYAGSGNLTIA 300
DB 241 QAEKASSSKSWITFDLQKKEVSVKRTQDPKLOMGKKLPLHLTLPOALPOYAGSGNLTIA 300
QY 207 -----
DB 207 -----
QY 361 LNPEAGMOCLLSDSGVLLSNIKVLPWTSTPVEPKSCDKHTHCPCPAPELLGSPSVF 420
DB 207 -----KCCVE---CPCPAPP-VAGPSVF 226
QY 421 LFPPKPKDTLMTSRTPEVTCVVVDVSHEDPEVKENMYVDGVEVNAKTRPREEOYNSTR 480
DB 227 LFPPKPKDTLMTSRTPEVTCVVVDVSHEDPEVKENMYVDGVEVNAKTRPREEOYNSTR 286
QY 481 VVSVLTVLHODMLNGEKYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 540
DB 287 VVSVLTVLHODMLNGEKYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 346
QY 541 QVSLTCLVKGFPSPDIAVEMESNGQPENNYKTTTPVLDSGSEFLLYSKLTVDKSRWQGN 600
DB 347 QVSLTCLVKGFPSPDIAVEMESNGQPENNYKTTTPVLDSGSEFLLYSKLTVDKSRWQGN 406
QY 601 VFSCSVMEALHNHYTKSLSPG 625
DB 407 VFSCSVMEALHNHYTKSLSPG 431

RESULT 27
AAB80883
ID AAB80883 standard; protein; 432 AA.
AC AAB80883;
XX
XX 29-MAY-2001 (first entry)
XX
DE Human CD4-gamma2 chimeric heavy chain homodimer.
XX
KW Human; Anti-HIV; CD4-IgG2 chimeric heterotetramer;
XX
OS Homo sapiens.
XX
PN US6187748-B1.
XX
PD 13-FEB-2001.
XX
PF 07-JUN-1995; 95US-00485372.
XX
PR 08-FEB-1991; 91US-00653684.
PR 10-FEB-1992; 92MO-US001143.
PR 08-DEC-1992; 92US-00960440.
XX
PA (PROG-) PROGENICS PHARM INC.
XX
PI Maddon PJ, Beaudry GA;
XX
DR MPI; 2001-264981/27.
XX
DR N-P8DB; AAF77629.
XX
PT Inhibiting human immunodeficiency virus (HIV) infection of a CD4+ cell,
PT or treating a subject having CD4+ cells infected with HIV involves using
PT CD4-IgG2 chimeric heterotetramer to form a complex with the HIV.
XX

```

```

PS Disclosure; Fig 3; 55pp; English.
XX
CC The present invention relates to a method for inhibiting infection of a
CC CD4+ cell by HIV. The method comprises contacting the HIV with a CD4-IgG2
CC chimeric heterotetramer to form a complex with the HIV (CD4 = cluster of
CC differentiation 4; IgG2 = immunoglobulin gamma 2). CD4 is a cell surface
CC glycoprotein that is expressed primarily on the surface of T cells. In
CC man, CD4 is the target of interaction with HIV. The heterotetramer has
CC two heavy and two light chains which are encoded by expression vectors
CC CD4-IgG2HC-PRCCMV (V1) and CD4-KLC-PRCCMV (V2), respectively. The method
CC is used to inhibit infection of a CD4+ cell by a HIV and to prevent CD4+
CC cells of a subject from becoming infected with HIV. The method is also
CC useful for treating a subject having CD4+ cells infected with HIV. The
CC present sequence is human fusion protein: CD4-gamma2 chimeric heavy chain
CC homodimer. This sequence was used in the method of the present invention
XX
SQ Sequence 432 AA;
XX
Query Match 60.8%; Score 2077; DB 4; Length 432;
Best Local Similarity 66.1%; Pred. No. 1.4e-105;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

QY 1 MNRGVPFRHLVLVQLALLPAPATQGNKVLGKGDVLELTCTASQKSIQPHMKNNOIK 60
DB 1 MNRGVPFRHLVLVQLALLPAPATQGNKVLGKGDVLELTCTASQKSIQPHMKNNOIK 60
QY 61 ILGNQGSFLTKGPSKLNADRSRSLMDQGNPPLIKNLKIEDSTYICVEYDQKEVQL 120
DB 61 ILGNQGSFLTKGPSKLNADRSRSLMDQGNPPLIKNLKIEDSTYICVEYDQKEVQL 120
QY 121 LVFGLTANSDTHLLOQSLTLTLESPPGSSPVOCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDTHLLOQSLTLTLESPPGSSPVOCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCTVLQNOKKVEFKIDIVLAFOKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLQNOKKVEFKIDIVLAFOKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 240
QY 241 QAEKASSSKSWITFDLQKKEVSVKRTQDPKLOMGKKLPLHLTLPOALPOYAGSGNLTIA 300
DB 207 -----
QY 301 LEAKTKLHQEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKAKVSKREKPVWV 360
DB 207 -----
QY 361 LNPEAGMOCLLSDSGVLLSNIKVLPWTSTPVEPKSCDKHTHCPCPAPELLGSPSVF 420
DB 207 -----KCCVE---CPCPAPP-VAGPSVF 226
QY 421 LFPPKPKDTLMTSRTPEVTCVVVDVSHEDPEVKENMYVDGVEVNAKTRPREEOYNSTR 480
DB 227 LFPPKPKDTLMTSRTPEVTCVVVDVSHEDPEVKENMYVDGVEVNAKTRPREEOYNSTR 286
QY 481 VVSVLTVLHODMLNGEKYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 540
DB 287 VVSVLTVLHODMLNGEKYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 346
QY 541 QVSLTCLVKGFPSPDIAVEMESNGQPENNYKTTTPVLDSGSEFLLYSKLTVDKSRWQGN 600
DB 347 QVSLTCLVKGFPSPDIAVEMESNGQPENNYKTTTPVLDSGSEFLLYSKLTVDKSRWQGN 406
QY 601 VFSCSVMEALHNHYTKSLSPG 625
DB 407 VFSCSVMEALHNHYTKSLSPG 431

RESULT 28
ABG71122
ID ABG71122 standard; protein; 432 AA.
AC ABG71122;
XX

```

DT	17-JUN-2003	(first entry)
XX	CD4-gamma2 chimeric heavy chain of the CD4-IgG2 chimeric protein.	
XX	CD4; gamma2 heavy chain; human immunodeficiency virus-1; HIV-1; mutant; mutein.	
XX	Homo sapiens.	
XX	Synthetic.	
XX	Key	Location/Qualifiers
XX	Peptide	1..25
XX	Protein	/label= Signal_peptide
XX		26..432
XX		/note= "Mature CD4-gamma2 chimeric heavy chain of the CD4-IgG2 chimeric heterotetramer"
XX	US6451313-B1.	
XX	17-SEP-2002.	
XX	07-JUN-1995;	95US-00484681.
XX	08-FEB-1991;	91US-00653684.
XX	10-FEB-1992;	92WO-US001143.
XX	08-DEC-1992;	92US-00960440.
XX	(PROG-) PROGENICS PHARM INC.	
XX	Maddon PJ, Beaudry GA;	
XX	WPI; 2003-038273/03.	
XX	N-PSDB; ABB55720.	
XX	Novel CD4-immunoglobulin G2 chimeric heterotetramer neutralizes human immunodeficiency virus-1 with two heavy and light chains encoded by expression vectors designated CD4-IgG2HC-prcCMV and CD4-kLC-prcCMV, respectively.	
XX	Disclosure; Fig 3A-F; 54pp; English.	
XX	The invention describes a purified CD4-immunoglobulin (Ig)G2 chimeric heterotetramer (I) that neutralises human immunodeficiency virus-1 (HIV-1) having two heavy chains encoded by an expression vector designated CD4-IgG2HC-prcCMV, and two light chains encoded by expression vector designated CD4-kLC-prcCMV. (I) and a composition (II) comprising (I) or (II) linked to a toxin, are useful for inhibiting HIV infection of a CD4 cell, and preventing a subject being infected with HIV by blocking the spread of HIV infection. This is the amino acid sequence of the CD4-gamma2 chimeric heavy chain of the CD4-IgG2 chimeric heterotetramer useful in inhibiting HIV infection	
XX	Sequence 432 AA;	
XX	Query Match	60.8%; Score 2077; DB 6; Length 432;
XX	Best Local Similarity	66.1%; Pred. No. 1.4e-105;
XX	Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3	
XX	1 MNRGVPFPHLLVLTALLPATQGNKVLGKKGDPVELTCTASQKKSIOFHMKNSNOIK 60	
XX	1 MNRGVPFPHLLVLTALLPATQGNKVLGKKGDPVELTCTASQKKSIOFHMKNSNOIK 60	
XX	1 ILGNQGSFLTKGPPSLKLRADSRRLMDQGNFPLIIKLIKIDSDPTIYCEVEDQKEEYVL 120	
XX	61 ILGNQGSFLTKGPPSLKLRADSRRLMDQGNFPLIIKLIKIDSDPTIYCEVEDQKEEYVL 120	
XX	121 LVFGITANSDFTHLLQGGSIITLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSDG 180	
XX	121 LVFGITANSDFTHLLQGGSIITLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSDG 180	
XX	181 TWTCIVLONOKKVEKIDIVLAPQKASSIVYKKKGGEVFEFPLAFVETKLTGSGELMW 240	
XX	181 TWTCIVLONOKKVEKIDIVLAFPR----- 206	

QY	241	QARRASSKSMWITFLDKLKNKSVKRVTDPKLQMGKSLPLHLTLPLQALLPQVAGSGNTLTA	300
Db	207	-----	206
QY	301	LEAKTGKLEHQEVNLVVMRATOLQKNLTCEVMGPTSFKLMLSLKLENKAVSKKEKPYMV	360
Db	207	-----	206
QY	361	LNPEAGMOCCLSDSGQVLLESNIKVLPTWSTPVPKSCDKTHTCPPCPAPELLGFSVF	420
Db	207	-----KCCVE---CPPCPAP-VAGPSVF	226
QY	421	LPPPKRDTLMTSRTEPVTCVVVDVSHEDPEVKFMVYDGVGVNNAKTKPREEOYNSTYR	480
Db	227	LPPPKRDTLMTSRTEPVTCVVVDVSHEDPEVKFMVYDGVGVNNAKTKPREEQPNSTFR	286
QY	481	VSVLTITLVHQMVLNGKVKCKVSNKALPAPIEKTIISKAKGQPREPOVYTLPPSRDELTKN	540
Db	287	VSVLTITLVHQMVLNGKVKCKVSNKGLPAPIEKTIISKKGQPREPOVYTLPPSRDEMTKN	346
QY	541	QVSLTCLVKGFPYSDIAVMESNGQPRENNYKTTTPRVLSDSFFLYSKLTVDKSRNQQGN	600
Db	347	QVSLTCLVKGFPYSDIAVMESNGQPRENNYKTTTPRMLDSGSPFLYSKLTVDKSRNQQGN	406
QY	601	VFSCSVNHEALNHNHYTQKSLSPG 625	
Db	407	VFSCSVNHEALNHNHYTQKSLSPG 431	
RESULT 29			
AA19510			
ID	AA19510	standard; protein; 481 AA.	
AC	AA19510;		
XX	09-JAN-2001	(first entry)	
DE	CD4-IgM fusion protein CH4Pmu.		
XX			
KM	CD4; IgM, human; CD4Pmu; fusion protein; immunoglobulin; HIV; SIV; gp120,		
XX	therapy; diagnosis.		
OS	Homo sapiens.		
XX			
FT	Key	Location/Qualifiers	
FT	Protein	1..395	
FT	Protein	/note="CD4 extracellular region"	
FT		400..481	
FT		/note="IgM heavy chain partial sequence"	
XX			
PN	US6117656-A.		
XX			
PD	12-SEP-2000.		
PF	07-JUN-1995;	95US-00479353.	
XX			
PR	22-JAN-1988;	88US-00147351.	
PR	23-JAN-1989;	89US-00299596.	
PR	09-JUN-1992;	92US-00896781.	
PR	12-APR-1993;	93US-00057952.	
PR	04-FEB-1994;	94US-00191708.	
XX			
PA	(GENO) GEN HOSPITAL CORP.		
XX			
PI	Seed B;		
XX			
DR	WPI; 2000-586558/55.		
DR	N-PSDB; AAA50662. -		
XX			
PT	CD4-immunoglobulin fusion proteins, useful for targeting gp120 of HIV or		
XX	SIV.		

```

PS Example 1; Col 49-60; 39pp; English.
XX
CC The present sequence is that of fusion protein CD4Pmu comprising the
CC extracellular portion of CD4, which binds to HIV gp120, linked at its C-
CC terminus to the human IgM heavy chain. To obtain the fusion protein, DNA
CC encoding CD4 was linked to IgM DNA at the Pst site upstream of the CH2
CC region (see AAs50653). Fusion protein CD4Pmu and a nucleic acid encoding
CC it are claimed. Also claimed are a vector comprising the nucleic acid,
CC and a method of producing the fusion protein in secreted form using a
CC transformed host cell. The fusion protein may further comprise a
CC therapeutic agent, radiolabel or NMR imaging agent. The fusion protein
CC can be administered to an animal (including humans) for treatment of HIV
CC or SIV infection, and can also be used in assays for HIV or SIV, imaging
CC and tissue status. IgM fusion proteins such as CD4Pmu provide complement-
CC mediated immunity.
XX
SQ Sequence 481 AA;
Query Match 60.5%; Score 2066; DB 3; Length 481;
Best Local Similarity 83.8%; Pred. No. 6,1e-105;
Matches 415; Conservative 19; Mismatches 37; Indels 24; Gaps 6;
QY 1 MNRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDVTELTCTASQKKSIOFHMKNNOIK 60
DB 1 MNRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDVTELTCTASQKKSIOFHMKNNOIK 60
QY 61 ILGNQSFLLTKGSKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILGNQSFLLTKGSKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDFHLQGSGLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDFHLQGSGLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNOQKVEFKIDIVLAFQASSIYKKEGEVFSFPLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKVEFKIDIVLAFQASSIYKKEGEVFSFPLAFVTEKLTGSGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPYWV 360
DB 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPYWV 360
QY 361 LNPEAGMOCCLSDSGQVLLSNIKVLPWTGSTPVEBPKSCDKHTHPCRPAPBLG--GPS 418
DB 361 LNPEAGMOCCLSDSGQVLLSNIKVLPWTGSTPVEBPKSCDKHTHPCRPAPBLG--GPS 418
QY 419 VFLFPKPKDPTLMIS--RTPEVTCVVVDVSHEDPEVKFMNYVDGVEVNAKTKPR-----E 472
DB 419 VFLFPKPKDPTLMIS--RTPEVTCVVVDVSHEDPEVKFMNYVDGVEVNAKTKPR-----E 472
QY 473 EQNSTYRVVSVLTV 487
DB 473 EQNSTYRVVSVLTV 487
QY 465 ESGPTTYKVTSTLT 479
DB 465 ESGPTTYKVTSTLT 479
RESULT 30
AAs59171
ID AAs59171 standard; protein; 481 AA.
XX
AC AAs59171;
XX
DT 14-MAR-2000 (first entry)
XX
DE CD4-Ig fusion protein CD4Pmu.
XX
KW HIV, extracellular; CD4, gp120; immunoglobulin; Ig; fusion protein;
XX secreted protein; SIV infection; medicament.
OS Synthetic.

```

```

OS Homo sapiens.
XX
PN CA1340741-C.
XX
PD 14-SEP-1999.
XX
PF 20-JAN-1989; 89CA-00588749.
XX
PR 20-JAN-1989; 89CA-00588749.
XX
PA (GEHO ) GEN HOSPITAL CORP.
XX
PI Seed B;
XX
PI WPI; 2000-063015/06.
XX
DR N-PSDB; AA248204.
XX
PT New fusion gene encoding immunoglobulin-CD4 fusion proteins, useful in
XX the treatment of HIV or simian immunodeficiency virus infections.
XX
PS Example 1; Page 54-60; 89pp; English.
XX
CC The invention provides a fusion gene encoding a fusion protein that
CC comprises an extracellular CD4 DNA sequence or its fragment which binds
CC to HIV gp120 when fused to an immunoglobulin (Ig) chain and the DNA
CC sequence of an Ig heavy or light chain, where the DNA sequence encoding
CC the variable region has been replaced with the DNA sequence which encodes
CC extracellular CD4 or its gp120 binding fragment. The fusion protein is
CC capable of being secreted. The fusion proteins are useful for treating
CC HIV or SIV infections in animals, preferably humans. They are also useful
CC for producing medicaments which can be used for treating HIV or SIV
CC infections in humans. The present sequence represents the fusion protein
CC CD4Pmu where the CD4 is linked to human Iggl at the Pst site upstream of
CC the CH2 region
XX
SQ Sequence 481 AA;
Query Match 60.5%; Score 2066; DB 3; Length 481;
Best Local Similarity 83.8%; Pred. No. 6,1e-105;
Matches 415; Conservative 19; Mismatches 37; Indels 24; Gaps 6;
QY 1 MNRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDVTELTCTASQKKSIOFHMKNNOIK 60
DB 1 MNRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDVTELTCTASQKKSIOFHMKNNOIK 60
QY 61 ILGNQSFLLTKGSKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILGNQSFLLTKGSKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDFHLQGSGLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDFHLQGSGLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNOQKVEFKIDIVLAFQASSIYKKEGEVFSFPLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKVEFKIDIVLAFQASSIYKKEGEVFSFPLAFVTEKLTGSGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPYWV 360
DB 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPYWV 360
QY 361 LNPEAGMOCCLSDSGQVLLSNIKVLPWTGSTPVEBPKSCDKHTHPCRPAPBLG--GPS 418
DB 361 LNPEAGMOCCLSDSGQVLLSNIKVLPWTGSTPVEBPKSCDKHTHPCRPAPBLG--GPS 418
QY 419 VFLFPKPKDPTLMIS--RTPEVTCVVVDVSHEDPEVKFMNYVDGVEVNAKTKPR-----E 472
DB 419 VFLFPKPKDPTLMIS--RTPEVTCVVVDVSHEDPEVKFMNYVDGVEVNAKTKPR-----E 472
QY 408 VSVFVP-PRDGFPGFRKSKLICATGFSR--QIQVSWLRGKGQVSGVTTDDQVQABAK 464
DB 408 VSVFVP-PRDGFPGFRKSKLICATGFSR--QIQVSWLRGKGQVSGVTTDDQVQABAK 464

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QY 473 EQYNSTRVSVLTIV 487
 DB 465 ESGPTTYKVTSTLTI 479

RESULT 31

AAV51081
 ID AAV51081 standard; protein; 481 AA.

AAV51081;

23-MAR-2000 (first entry)

Human fusion protein CD4Pmu.

Fusion protein; human; CD4; Igm; immunoglobulin; gp120;

anti-human immunodeficiency virus; CD4Pmu.

OS Homo sapiens.

OS Synthetic.

PN US6004781-A.

PD 21-DEC-1999.

PF 04-FEB-1994; 94US-00191708.

PR 22-JAN-1988; 88US-00147351.

PR 23-JAN-1989; 89US-00299596.

PR 09-JUN-1992; 92US-00896781.

PR 12-APR-1993; 93US-00057952.

PA (GEHO) GEN HOSPITAL CORP.

PI Seed B;

DR WPI: 2000-085792/07.

DR N-PSDB; AA244064.

PT Fusion protein useful for the treatment of human immunodeficiency virus.

PS Example 1; Col 49-58; 39pp; English.

CC This invention describes a novel nucleic acid (I) encoding a fusion

CC protein comprising a DNA sequence encoding amino acids 1-173 of CD4 (II)

CC and a DNA sequence encoding a human immunoglobulin (Ig) heavy or light

CC chain (III). The products of the invention have anti-human

CC immunodeficiency virus (HIV) activity and are capable of binding to

CC gp120. The fusion protein is useful for treating human immunodeficiency

CC virus (HIV) or simian immunodeficiency virus (SIV). This sequence

CC represents the fusion protein CD4Pmu which is constructed from CD4 linked

CC to human Igm upstream of the CH2 region

CC

XX Sequence 481 AA;

Query Match 60.3%; Score 2060; DB 3; Length 481;
 Best Local Similarity 83.6%; Pred. No. 1.3e-104;
 Matches 414; Conservative 18; Mismatches 39; Indels 24; Gaps 6;

QY 1 MNRGVPFPHLLVLOLALIPATQGNKYVLGGKGTVELTCTASQKSIQPHWKNNSQIK 60
 DB 1 MNRGVPFPHLLVLOLALIPATQGNKYVLGGKGTVELTCTASQKSIQPHWKNNSQIK 60
 QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNPFLIKKLTIEDSTYICVEVDQKEEVQL 120
 DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNPFLIKKLTIEDSTYICVEVDQKEEVQL 120
 QY 121 LVFGLTANSDFHLLQGSGLTLTLSPSPSSPVQCRSPRGNKIQGKTLVSQLELQDSG 180
 DB 121 LVFGLTANSDFHLLQGSGLTLTLSPSPSSPVQCRSPRGNKIQGKTLVSQLELQDSG 180
 QY 181 TWTCTVLQONOKKVEFKIDIVLAFQKASSIVYKKEGGEVFEFPLAFVETKLTSGGELMW 240
 DB 181 TWTCTVLQONOKKVEFKIDIVLAFQKASSIVYKKEGGEVFEFPLAFVETKLTSGGELMW 240

DB 181 TWTCTVLQONOKKVEFKIDIVLAFQKASSIVYKKEGGEVFEFPLAFVETKLTSGGELMW 240
 QY 241 QAERASSSSKMTIFEDLNKKEVSVRVYQDPKLGKGLPHLTLTPQALPOYAGSGNTLTA 300
 DB 241 QAERASSSSKMTIFEDLNKKEVSVRVYQDPKLGKGLPHLTLTPQALPOYAGSGNTLTA 300
 QY 301 LEAKTGKHOEVLVVRATQOLNLTCEVWGPTSPFLMLSLKENKAKVSKREKVVW 360
 DB 301 LEAKTGKHOEVLVVRATQOLNLTCEVWGPTSPFLMLSLKENKAKVSKREKVVW 360
 QY 361 LNPBAGWOCCLISDSGQVLLESNIKVLPTWSTPVEPKSCDKHTCPCPAPELIG--GPS 418
 DB 361 LNPBAGWOCCLISDSGQVLLESNIKVLPTWSTPVEPKSCDKHTCPCPAPELIG--GPS 418
 QY 419 VFLFPPKPKDITLM-ISRTPVETCVVVDVSHEDPEVKFNWYGVGVANAKTKPR-----E 472
 DB 419 VFLFPPKPKDITLM-ISRTPVETCVVVDVSHEDPEVKFNWYGVGVANAKTKPR-----E 472
 QY 408 VSVFVP--PROGFCPCPKSKLICQATGFSR--QIQVSWLRGQVSGVTTDQVQAEAK 464
 DB 408 VSVFVP--PROGFCPCPKSKLICQATGFSR--QIQVSWLRGQVSGVTTDQVQAEAK 464
 QY 473 EQYNSTRVSVLTIV 487
 DB 465 ESGPTTYKVTSTLTI 479

RESULT 32

AAV93011
 ID AAV93011 standard; protein; 481 AA.

AAV93011;

25-MAR-2003 (revised)

03-AUG-1992 (first entry)

DE Genetic construct which encodes CD4 linked to human Igm at the Pst site

DE upstream of the CH2 region (fusion protein CD4Pmu).

KM Fusion protein; immunoglobulin-like molecule; HIV; SIV; therapy;

OS diagnosis; CD4; gp120; binding fragment; glycoprotein; variable region.

OS Homo sapiens.

PN EP25262-A.

PD 26-JUL-1989.

PF 20-JAN-1989; 89EP-00100913.

PR 22-JAN-1988; 88US-00147351.

PA (GEHO) GEN HOSPITAL CORP.

PI Seed B;

DR WPI: 1989-214472/30.

DR N-PSDB; AAN90359.

PT Immunoglobulin-CD4 fusion proteins - used for treating HIV or SIV

PT infections or detecting HIV or SIV in sample.

PS Example; Table 4, Page 41-47; 68pp; English.

CC The fusion protein genes of the invention pref. comprises cDNA sequences

CC which encode CD4 or a fragment which binds gp120 ligated to an expression

CC plasmid which encodes an antibody in which the variable region of the

CC gene has been deleted (see WO87-02671). The CD4 portion of the fusion

CC protein may comprise the complete CD4 sequence, the 370 AA extracellular

CC region and the membrane spanning domain, or the extracellular region. The

CC Ig heavy chain is pref. from Igm, IgG1 or IgG3. The following are

CC specifically claimed: fusion proteins CD4lambda1, CD4mu, CD4Pmu,

CC CD4lambda1, and CD4mu (No. 67608), pCD4lambda (No. 67609) and

CC pCD4lambda1 (No. 67610). (Updated on 25-MAR-2003 to correct PA field.)

XX Sequence 481 AA;

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Query Match          60.3%; Score 2058; DB 1; Length 481;
Best Local Similarity 83.6%; Pred. No. 1.7e-104;
Matches 414; Conservative 19; Mismatches 38; Indels 24; Gaps 6;

QY 1 MNRGVPFRHLILVQLALIPAAATQGNKVVLGKGDVVELTCTASQKKSIOFHMKNSNOIK 60
    |||
DB 1 MNRGVPFRHLILVQLALIPAAATQGNKVVLGKGDVVELTCTASQKKSIOFHMKNSNOIK 60
QY 61 ILNGQSFLLTKGSKLNDRAISRSLMDQGNPLIINKLIEDSDTYICEVEQKEEVQL 120
    |||
DB 61 ILNGQSFLLTKGSKLNDRAISRSLMDQGNPLIINKLIEDSDTYICEVEQKEEVQL 120
QY 121 LVFGLTANSPTHLLOGQSLLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
    |||
DB 121 LVFGLTANSPTHLLOGQSLLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
    |||
DB 181 TWTCTVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
    |||
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
QY 301 LEAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVVW 360
    |||
DB 301 LEAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVVW 360
QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEPKSCDKTHTCPCPAPELLG--GPS 418
    |||
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEPKSCDKTHTCPCPAPELLG--GPS 418
QY 419 VLFPPKPKDTLMIS--RTPEVTCVVDVSHEDPEVKNVVDGEVYHNAKTKRP-----E 472
    |||
DB 419 VLFPPKPKDTLMIS--RTPEVTCVVDVSHEDPEVKNVVDGEVYHNAKTKRP-----E 472
QY 473 EGYNSTRVVSVLTV 487
    |||
DB 473 EGYNSTRVVSVLTV 487
QY 465 ESGPTTYKVTSTLTI 479
    |||
DB 465 ESGPTTYKVTSTLTI 479

RESULT 33
AAVS1080
ID AAVS1080 standard; protein; 436 AA.
XX
AC AAVS1080;
XX
DT 23-MAR-2000 (first entry)
XX
DE Human fusion protein CD4mg.
XX
KW Fusion protein; human; CD4; IgM; immunoglobulin; gp120;
XX
KW anti-human immunodeficiency virus; CD4mg.
XX
OS Homo sapiens.
XX
OS Synthetic.
XX
ID US6004781-A.
XX
PN US6004781-A.
XX
PD 21-DEC-1999.
XX
PF 04-FEB-1994; 94US-00191708.
XX
PR 22-JAN-1988; 88US-00147351.
XX
PR 23-JUN-1989; 89US-00295956.
XX
PR 09-JUN-1992; 92US-00896781.
XX
PR 12-APR-1993; 93US-00057952.
XX
PA (GEHO ) GEN HOSPITAL CORP.
XX
PI Seed B;
XX
XX WPI, 2000-085792/07.

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DR N-PSDB; AA244063.
XX
PT Fusion protein useful for the treatment of human immunodeficiency virus.
XX
PS Example 1; Col 41-50; 39pp; English.
XX
CC This invention describes a novel nucleic acid (I) encoding a fusion
CC protein comprising a DNA sequence encoding amino acids 1-173 of CD4 (II)
CC and a DNA sequence encoding a human immunoglobulin (Ig) heavy or light
CC chain (III). The products of the invention have anti-human
CC immunodeficiency virus (HIV) activity and are capable of binding to
CC gp120. The fusion protein is useful for treating human immunodeficiency
CC virus (HIV) or simian immunodeficiency virus (SIV). This sequence
CC represents the fusion protein CD4mg which is constructed from CD4 linked
CC to human IgM upstream of the CH1 region
XX
SQ Sequence 436 AA;
XX
Query Match          60.1%; Score 2053.5; DB 3; Length 436;
Best Local Similarity 92.9%; Pred. No. 2.6e-104;
Matches 405; Conservative 4; Mismatches 10; Indels 17; Gaps 3;

QY 1 MNRGVPFRHLILVQLALIPAAATQGNKVVLGKGDVVELTCTASQKKSIOFHMKNSNOIK 60
    |||
DB 1 MNRGVPFRHLILVQLALIPAAATQGNKVVLGKGDVVELTCTASQKKSIOFHMKNSNOIK 60
QY 61 ILNGQSFLLTKGSKLNDRAISRSLMDQGNPLIINKLIEDSDTYICEVEQKEEVQL 120
    |||
DB 61 ILNGQSFLLTKGSKLNDRAISRSLMDQGNPLIINKLIEDSDTYICEVEQKEEVQL 120
QY 121 LVFGLTANSPTHLLOGQSLLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
    |||
DB 121 LVFGLTANSPTHLLOGQSLLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
    |||
DB 181 TWTCTVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
    |||
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
QY 301 LEAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVVW 360
    |||
DB 301 LEAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVVW 360
QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEPKSCDKTHTCPCPAPELLGSPVF 420
    |||
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEPKSCDKTHTCPCPAPELLGSPVF 420
QY 421 LFPKPKDTLMISRTTP 436
    |||
DB 421 LFPKPKDTLMISRTTP 436
QY 407 ---PRAKLTSPSARTP 419
    |||
DB 407 ---PRAKLTSPSARTP 419

RESULT 34
AAVS9170
ID AAVS9170 standard; protein; 474 AA.
XX
AC AAVS9170;
XX
DT 14-MAR-2000 (first entry)
XX
DE CD4-Ig fusion protein CD4mmu.
XX
DE HIV; extracellular; CD4; gp120; immunoglobulin; Ig; fusion protein;
XX
KW secreted protein; SIV infection; medicament.
XX
OS Synthetic.
XX
OS Homo sapiens.
XX
PN CA1340741-C.
XX

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PD 14-SEP-1999.
XX
XX 20-JAN-1989; 89CA-00588749.
XX
XX 20-JAN-1989; 89CA-00588749.
XX
XX (GEHO ) GEN HOSPITAL CORP.
XX
XX Seed B;
XX
XX WPI: 2000-063015/06.
XX N-PSDB; AA248203.
XX
XX New fusion gene encoding immunoglobulin-CD4 fusion proteins, useful in
XX the treatment of HIV or simian immunodeficiency virus infections.
XX
XX Example 1; Page 47-53; 89pp; English.
XX
XX The invention provides a fusion gene encoding a fusion protein that
XX comprises an extracellular CD4 DNA sequence or its fragment which binds
XX to HIV gp120 when fused to an immunoglobulin (Ig) chain and the DNA
XX sequence of an Ig heavy or light chain, where the DNA sequence encoding
XX the variable region has been replaced with the DNA sequence which encodes
XX extracellular CD4 or its gp120 binding fragment. The fusion protein is
XX capable of being secreted. The fusion proteins are useful for treating
XX HIV or SIV infections in animals, preferably humans. They are also useful
XX for producing medicaments which can be used for treating HIV or SIV
XX infections in humans. The present sequence represents the fusion protein
XX CD4mu where the CD4 is linked to human IgG1 at the Met2 site upstream of
XX the CH1 region
XX
XX Sequence 474 AA;
XX
XX Query Match 60.0%; Score 2047.5; DB 3; Length 474;
XX Best Local Similarity 90.7%; Pred. No. 61e-104;
XX Matches 409; Conservative 3; Mismatches 18; Indels 21; Gaps 5;
XX
QY 1 MNRGVPFRHLILVLTQALLPAPATQGNKRVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
DB 1 MNRGVPFRHLILVLTQALLPAPATQGNKRVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
QY 61 ILNGQSFLLTKGPKSLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILNGQSFLLTKGPKSLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDTHLLOQGSLLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLLOQGSLLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNOKKVEFKIDIVLAFQKASSIYKKEGEOVESFPPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLQNOKKVEFKIDIVLAFQKASSIYKKEGEOVESFPPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSSKSWTTFPLKKNKEVSVKRVTDPKLQNGKKLPLHLLTLPQVAGSGLNTLA 300
DB 241 QAERASSSSKSWTTFPLKKNKEVSVKRVTDPKLQNGKKLPLHLLTLPQVAGSGLNTLA 300
QY 301 LEAKGKGLHGVNVLVVRATOLQKLTCEVWGPTSPKLMLSKLENKEAKYSKKEKPYWV 360
DB 301 LEAKGKGLHGVNVLVVRATOLQKLTCEVWGPTSPKLMLSKLENKEAKYSKKEKPYWV 360
QY 361 LNPEAGMWQCLLSDSGOVLLESNIKIVLPTWSTPV-----EPKSCD-----KTHPCP 406
DB 361 LNPEAGMWQCLLSDSGOVLLESNIKIVLPTWSTPVVADDELPLTAHPKQGTLSHLSSDICP 420
QY 407 PCPAPBL-LGGPSV-----FLFPP-KXPDTL 430
DB 421 PKPTPKAKLSTPSARTPAADLSPQRPNSPL 451
XX
XX RESULT 35
XX AAR27278 standard; protein; 532 AA.

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XX
XX AAR27278;
XX
XX 25-MAR-2003 (revised)
XX 28-JUL-1995 (first entry)
XX
XX CD4:gamma peptide chimeric protein.
XX
XX Fusion protein; CD4; extracellular domain; zeta; eta; gamma;
XX membrane spanning domain; intracellular domain; type I;
XX integral membrane homodimer; TCR; T cell antigen receptor;
XX extracellular domain; mouse; human; receptor; chimera;
XX Hsp-ALU tumour cell line; natural killer cell.
XX
XX Homo sapiens.
XX
XX W09215322-A1.
XX
XX 17-SEP-1992.
XX
XX 06-MAR-1992; 92WO-US001785.
XX
XX 07-MAR-1991; 91US-00665961.
XX
XX (GEHO ) GEN HOSPITAL CORP.
XX
XX Seed B, Romeo C, Kolanus W;
XX
XX WPI: 1992-331474/40.
XX N-PSDB; AAQ28706.
XX
XX Therapeutic cells expressing chimeric receptors - directing cellular
XX response to an infective agent, useful in treating HIV-1, AIDS
XX Pneumocystis carinii infections etc.
XX
XX Example 2; Page 74-76, 114pp; English.
XX
XX This sequence represents a fusion protein between the CD4 extracellular
XX domain and the gamma protein membrane spanning domain and intracellular
XX domain. The Fc-receptor-associated gamma chain is expressed in cell
XX surface complexes with additional polypeptides, some of which mediate
XX ligand recognition, and others which have undefined function. Gamma bears
XX a homodimeric structure and overall organisation very similar to that of
XX zeta (see also AAQ28704), and is a component of both the mast
XX cell/basophil high affinity IGE receptor, Fc-epsilon-RI, which consists
XX of at least three distinct polypeptide chains and one of the low affinity
XX receptors for IgG, represented in mice by Fc-gamma-RII-alpha. In the
XX production of the CD4 receptor chimera, the gamma cDNA was isolated from
XX the Hsp-ALU tumour cell line and from human natural killer cells. The
XX gamma cDNA was joined to the extracellular domain by engineering a BamHI
XX site just upstream of the membrane spanning domain, by a BamHI site
XX naturally present a few residues upstream of the membrane spanning
XX domain. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 532 AA;
XX
XX Query Match 59.7%; Score 2039; DB 2; Length 532;
XX Best Local Similarity 99.0%; Pred. No. 2e-103;
XX Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;
XX
QY 1 MNRGVPFRHLILVLTQALLPAPATQGNKRVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
DB 1 MNRGVPFRHLILVLTQALLPAPATQGNKRVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
QY 61 ILNGQSFLLTKGPKSLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILNGQSFLLTKGPKSLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDTHLLOQGSLLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLLOQGSLLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNOKKVEFKIDIVLAFQKASSIYKKEGEOVESFPPLAFTVEKLTGSGELMW 240

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Db      181 |TWTCTVLQNKQKVEKFIIDIVLAFQKASSIVYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
Qy      241 QAEKASSSKSWITTFDLKKNKESVYKRVTOPKLOMGKKLPLHLTLPOALPOYAGSGNLTIA 300
Db      241 QAEKASSSKSWITTFDLKKNKESVYKRVTOPKLOMGKKLPLHLTLPOALPOYAGSGNLTIA 300
Qy      301 LEAKTGKLGHOEVNLVYMRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPYWV 360
Db      301 LEAKTGKLGHOEVNLVYMRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPYWV 360
Qy      361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
Db      361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401

RESULT 36
AAR78678
ID AAR78678 standard; protein; 532 AA.
XX
AC AAR78678;
XX
DT 16-APR-1996 (first entry)
XX
DE T-cell receptor etc.
XX
KM Chimeric receptor; CD4; T-cell receptor etc; HIV; cytolysis;
KW human immunodeficiency virus; adoptive immunotherapy.
XX
OS Homo sapiens.
XX
PN MO9521528-A1.
XX
PD 17-AUG-1995.
XX
PF 12-JAN-1995; 95WO-US000454.
XX
PR 14-FEB-1994; 94US-00195395.
PR 02-AUG-1994; 94US-00284391.
XX
PA (GEHO) GEN HOSPITAL CORP.
XX
PI Seed B, Banapour B, Romeo C, Kolanus W;
XX
DR WPI; 1995-292893/38.
DR N-PSDB; AAQ96124.
XX
PT Target cytolysis of HIV-infected cells - by chimeric CD4 receptor-bearing
PT cells.
XX
PS Example 2; Page 78-79; 118pp; English.
XX
CC Fusion proteins comprising the extracellular domain of CD4 fused to T-
CC cell receptor zeta, gamma or eta (AAR78676-78, respectively) were
CC expressed in CV1 using a vaccine virus vector. These CD4:zeta, CD4:gamma
CC and CD4:eta chimeric receptors mediated cytolysis of targets expressing
CC HIV gp120/41
XX
SQ Sequence 532 AA;

Query Match 59.7%; Score 2039; DB 2; Length 532;
Best Local Similarity 99.0%; Pred. No. 2e-103; Indels 2; Gaps 1;
Matches 397; Conservative 1; Mismatches 1;

Qy      1 MNRGVFRHLTLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHKNSNQIK 60
Db      1 MNRGVFRHLTLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHKNSNQIK 60
Qy      61 ILGNQGSFLTKGSKINDRADSRRSIMDQGNFPLIINKLKIENSDTYICEVEPOKEEVOL 120
Db      61 ILGNQGSFLTKGSKINDRADSRRSIMDQGNFPLIINKLKIENSDTYICEVEPOKEEVOL 120
Qy      121 LVFGLTRANSDTHLQGGSLTLTLSPGSSPSVQGRSPRGKNIQGGKTLVSQLELQDSG 180

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Db      121 LVFGLTRANSDTHLQGGSLTLTLSPGSSPSVQGRSPRGKNIQGGKTLVSQLELQDSG 180
Qy      181 TWTCTVLQNKQKVEKFIIDIVLAFQKASSIVYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
Db      181 TWTCTVLQNKQKVEKFIIDIVLAFQKASSIVYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
Qy      241 QAEKASSSKSWITTFDLKKNKESVYKRVTOPKLOMGKKLPLHLTLPOALPOYAGSGNLTIA 300
Db      241 QAEKASSSKSWITTFDLKKNKESVYKRVTOPKLOMGKKLPLHLTLPOALPOYAGSGNLTIA 300
Qy      301 LEAKTGKLGHOEVNLVYMRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPYWV 360
Db      301 LEAKTGKLGHOEVNLVYMRATQLOKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPYWV 360
Qy      361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
Db      361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401

RESULT 37
AAR89458
ID AAR89458 standard; protein; 532 AA.
XX
AC AAR89458;
XX
DT 26-SEP-1996 (first entry)
XX
DE CD4:eta fusion protein.
XX
KM CD7; transmembrane domain; chimeric receptor; CD5; CD34; CH2; CH3; IgG1;
KW human; CD4; HIV; proteolaceous alpha-helix; T cell; B cell; neutrophil;
KW dendritic cell; therapy; mammal; infection.
XX
OS Synthetic.
XX
PN MO9603883-A1.
XX
PD 15-FEB-1996.
XX
PF 26-JUL-1995; 95WO-US009468.
XX
PR 02-AUG-1994; 94US-00284391.
PR 24-FEB-1995; 95US-00394388.
XX
PA (GEHO) GEN HOSPITAL CORP.
XX
PI Seed B, Banapour B, Romeo C, Kolanus W;
XX
DR WPI; 1996-129034/13.
DR N-PSDB; AAT10803.
XX
PT Membrane-bound chimeric receptor comprising extracellular portion
PT including CD4 fragment - cells expressing receptor can be used for
PT treatment of HIV infection.
XX
PS Example 2; Page 80-81; 134pp; English.
XX
CC AAT10801-T10803 represent membrane bound proteinaceous chimeric receptors
CC of the invention. This sequence represents the CD4:eta chimera. The
CC transmembrane region of the chimeric receptor acts to separate the
CC intracellular and extracellular domains of the chimera, and contains a
CC portion of the CD7 (see AAR89440), CD5 or CD34 transmembrane domains.
CC Alternatively, the extracellular portion of the chimera can be separated
CC from the intracellular domain by the hinge, CH2 and CH3 domains of human
CC IgG1 (see AAR89441). The extracellular portion of the chimeric receptor
CC contains a fragment of CD4 (amino acids 1-394 or 1-200 of the CD4
CC sequence, see AAR89450 and AAR89451) which specifically recognizes and
CC binds HIV-infected cells, but does not mediate HIV infection. The
CC extracellular domain of the receptor is separated from the cell membrane
CC by 48 or 72 angstroms, or by one or more proteinaceous alpha-helices.
CC cells expressing the receptor are preferably T cells, B cells,
CC neutrophils, or dendritic cells. The therapeutic cells expressing the

```

CC chimeric receptor are administered to a mammal to treat HIV infection
 XX
 SQ Sequence 532 AA;
 Query Match 59.7%; Score 2039; DB 2; Length 532;
 Best Local Similarity 99.0%; Pred. No. 2e-103;
 Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;
 QY 1 MNRGVPFRHLILVQLALPAAATQGNKVLGKKGDVVELTCTAOKKSIOFHMKNNOIK 60
 DB 1 MNRGVPFRHLILVQLALPAAATQGNKVLGKKGDVVELTCTAOKKSIOFHMKNNOIK 60
 QY 61 ILGNQGSFLTKGSPSKLNDRAISRSLMDQGNFPLIIKNIKIEDSDTYICEVEDQKEEYQL 120
 DB 61 ILGNQGSFLTKGSPSKLNDRAISRSLMDQGNFPLIIKNIKIEDSDTYICEVEDQKEEYQL 120
 QY 121 LVFGLTANSDTHLLOQGSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSDTHLLOQGSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWCTVLONQKKEFKIDIVLAFQKASSIVYKKEGQVEFSFPLAFTVEKLTSGSELWM 240
 DB 181 TWCTVLONQKKEFKIDIVLAFQKASSIVYKKEGQVEFSFPLAFTVEKLTSGSELWM 240
 QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPPKLOMGKKLPHLITLPOLPOYAGSGNLTIA 300
 DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDPPKLOMGKKLPHLITLPOLPOYAGSGNLTIA 300
 QY 301 LEAKTGKLEHVEVNLVVMRATOLQKNLTCEVWGPTSPKLMSTLKNKEAKVSKREKPVW 360
 DB 301 LEAKTGKLEHVEVNLVVMRATOLQKNLTCEVWGPTSPKLMSTLKNKEAKVSKREKPVW 360
 QY 361 LNPEAGMWOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
 DB 361 LNPEAGMWOCCLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401
 RESULT 38
 AAM83141
 ID AAM83141 standard; protein; 532 AA.
 AC AAM83141;
 DT 03-FEB-1999 (first entry)
 DE Chimeric receptor containing human eta polypeptide.
 XX Human; zeta; eta; gamma; membrane-bound chimeric receptor; infection;
 KM tumour; cancer cell; autoimmune-generated cell; T cell receptor; CD3;
 KM CD4; B cell receptor; Fc receptor; pathogen; bacterial; fungal;
 KM protozoan; viral.
 XX Synthetic.
 OS Homo sapiens.
 PN US5843728-A.
 PD 01-DEC-1998.
 PP 05-APR-1995; 95US-00417495.
 PR 07-MAR-1991; 91US-00665961.
 PR 06-MAR-1992; 92US-00847566.
 PR 28-FEB-1994; 94US-00203866.
 PA (GEMO) GEN HOSPITAL CORP.
 PI Romeo C, Kolanus W, Seed B;
 DR MPI; 1999-044582/04.
 DR N-PSDB; AAV70157.
 PT Membrane-bound chimeric receptors - comprising extracellular portion

PT which recognises and binds a target cell and an intracellular portion of
 PT e.g. a T-cell receptor.
 XX
 PS Claim 11; Col 45-48; 57pp; English.
 CC The present invention describes DNA encoding a membrane-bound chimeric
 CC receptor comprising: (a) an extracellular portion that specifically
 CC recognises and binds a target cell or a target infective agent; and (b)
 CC an intracellular portion of a T-cell receptor CD3, zeta or eta
 CC polypeptide, a B-cell receptor polypeptide or an Fc receptor polypeptide.
 CC The present sequence represents a chimeric receptor containing the human
 CC eta polypeptide. Cells expressing chimeric receptors of the present
 CC invention can be administered to mammals in order to destroy pathogens
 CC (e.g. bacteria, fungi, protozoa or viruses, especially HIV), cancer cells
 CC or autoimmune-generated cells
 XX
 SQ Sequence 532 AA;
 Query Match 59.7%; Score 2039; DB 2; Length 532;
 Best Local Similarity 99.0%; Pred. No. 2e-103;
 Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;
 QY 1 MNRGVPFRHLILVQLALPAAATQGNKVLGKKGDVVELTCTAOKKSIOFHMKNNOIK 60
 DB 1 MNRGVPFRHLILVQLALPAAATQGNKVLGKKGDVVELTCTAOKKSIOFHMKNNOIK 60
 QY 61 ILGNQGSFLTKGSPSKLNDRAISRSLMDQGNFPLIIKNIKIEDSDTYICEVEDQKEEYQL 120
 DB 61 ILGNQGSFLTKGSPSKLNDRAISRSLMDQGNFPLIIKNIKIEDSDTYICEVEDQKEEYQL 120
 QY 121 LVFGLTANSDTHLLOQGSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSDTHLLOQGSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWCTVLONQKKEFKIDIVLAFQKASSIVYKKEGQVEFSFPLAFTVEKLTSGSELWM 240
 DB 181 TWCTVLONQKKEFKIDIVLAFQKASSIVYKKEGQVEFSFPLAFTVEKLTSGSELWM 240
 QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPPKLOMGKKLPHLITLPOLPOYAGSGNLTIA 300
 DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDPPKLOMGKKLPHLITLPOLPOYAGSGNLTIA 300
 QY 301 LEAKTGKLEHVEVNLVVMRATOLQKNLTCEVWGPTSPKLMSTLKNKEAKVSKREKPVW 360
 DB 301 LEAKTGKLEHVEVNLVVMRATOLQKNLTCEVWGPTSPKLMSTLKNKEAKVSKREKPVW 360
 QY 361 LNPEAGMWOCCLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401
 DB 361 LNPEAGMWOCCLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401
 RESULT 39
 AAR27276
 ID AAR27276 standard; protein; 575 AA.
 AC AAR27276;
 DT 25-MAR-2003 (revised)
 DT 28-JUL-1995 (first entry)
 DE CD4; zeta peptide chimeric protein.
 XX Fusion protein; CD4; extracellular domain; zeta; eta; gamma;
 KM membrane spanning domain; intracellular domain; type I;
 KM integral membrane homodimer; TCR; T cell antigen receptor;
 KM extracellular domain; mouse; human; receptor; chimera;
 KM HBP-ALL tumour cell line; natural killer cell.
 XX Homo sapiens.
 OS
 FH Key Location/Qualifiers
 FT Protein 1..399
 FT /note="CD4 extracellular domain"

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FT Protein 400..575
FT /note="Zeta membrane spanning and intracellular domain"
XX
XX
XX MO9215322-A1.
XX
XX 17-SEP-1992.
XX
XX 06-MAR-1992; 92MO-US001785.
XX
XX 07-MAR-1991; 91US-00665961.
XX
XX (GEHO ) GEN HOSPITAL CORP.
XX
XX Seed B, Romeo C, Kolanus W;
XX
XX MPI: 1992-331474/40.
XX
XX N-PSDB; AAQ28704.
XX
XX Therapeutic cells expressing chimeric receptors - directing cellular
XX PT response to an infective agent, useful in treating HIV-1, AIDS
XX PT Pneumocystis carinii infections etc.
XX
XX Example 2; Page 72-73; 114pp; English.
XX
XX This sequence represents a fusion protein between the CD4 extracellular
XX CC domain and the zeta protein membrane spanning domain and intracellular
XX CC domain. Zeta is a 32 kD type I integral membrane homodimer which has a 9
XX CC residue extracellular domain and a 112/113 residue intracellular domain
XX CC for mouse and human protein respectively. In the production of the CD4
XX CC receptor chimera, the zeta cDNA was isolated from the HPA-ALL tumour cell
XX CC line and from human natural killer cells. The zeta cDNA was joined to the
XX CC extracellular domain of an engineered form of CD4 possessing a BamHI site
XX CC just upstream of the membrane spanning domain, by a BamHI site naturally
XX CC present a few residues upstream of the membrane spanning domain. (Updated
XX CC on 25-MAR-2003 to correct FN field.)
XX
XX Sequence 575 AA;
SQ

Query Match 59.7%; Score 2039; DB 2; Length 575;
Best Local Similarity 99.0%; Pred. No. 2.2e-103;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVFPRHLLVLTQLALPPATQGNKVVLGKGGDTVELTCTASQKKSIOFHMKNNSNQIK 60
DB 1 MNRGVFPRHLLVLTQLALPPATQGNKVVLGKGGDTVELTCTASQKKSIOFHMKNNSNQIK 60
QY 61 ILGNQGSFLTKGSPSKLNDRAISRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILGNQGSFLTKGSPSKLNDRAISRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDPHLLQGSLLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDPHLLQGSLLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVTLQNOKKVEFKIDIVLAFQKASSIYVKKKEGEQVEFSPLAFTVEKLTSGGELMW 240
DB 181 TWTCVTLQNOKKVEFKIDIVLAFQKASSIYVKKKEGEQVEFSPLAFTVEKLTSGGELMW 240
QY 241 QAEERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QAEERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKGLHOEVNLYVMRATQLOKNTCEVWGPTSPKMLSLKLENKEAKVSKKEKPVWV 360
DB 301 LEAKTGKGLHOEVNLYVMRATQLOKNTCEVWGPTSPKMLSLKLENKEAKVSKKEKPVWV 360
QY 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPVHADPKLC 401
DB 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPVHADPKLC 401

RESULT 40
AAR78676
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ID AAR78676 standard; protein; 575 AA.
XX
XX AAR78676;
XX
XX 16-APR-1996 (first entry)
XX
XX T-cell receptor zeta.
XX
XX Chimeric receptor; CD4; T-cell receptor zeta; HIV; cytolysis;
XX KW human immunodeficiency virus; adoptive immunotherapy.
XX
XX Homo sapiens.
XX
XX MO9521528-A1.
XX
XX 17-AUG-1995.
XX
XX 12-JAN-1995; 95MO-US000454.
XX
XX 14-FEB-1994; 94US-00195395.
XX
XX 02-AUG-1994; 94US-00284391.
XX
XX (GEHO ) GEN HOSPITAL CORP.
XX
XX Seed B, Banapour B, Romeo C, Kolanus W;
XX
XX MPI: 1995-292893/38.
XX
XX N-PSDB; AAQ96122.
XX
XX Target cytolysis of HIV-infected cells - by chimeric CD4 receptor-bearing
XX PT cells.
XX
XX Example 2; Page 76-77; 118pp; English.
XX
XX Fusion proteins comprising the extracellular domain of CD4 fused to T-
XX CC cell receptor zeta, gamma or eta (AAR78676-78, respectively) were
XX CC expressed in CV1 using a vaccine virus vector. These CD4:zeta, CD4:gamma
XX CC and CD4:eta chimeric receptors mediated cytolysis of targets expressing
XX CC HIV gp120/41
XX
XX Sequence 575 AA;
SQ

Query Match 59.7%; Score 2039; DB 2; Length 575;
Best Local Similarity 99.0%; Pred. No. 2.2e-103;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVFPRHLLVLTQLALPPATQGNKVVLGKGGDTVELTCTASQKKSIOFHMKNNSNQIK 60
DB 1 MNRGVFPRHLLVLTQLALPPATQGNKVVLGKGGDTVELTCTASQKKSIOFHMKNNSNQIK 60
QY 61 ILGNQGSFLTKGSPSKLNDRAISRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILGNQGSFLTKGSPSKLNDRAISRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDPHLLQGSLLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDPHLLQGSLLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVTLQNOKKVEFKIDIVLAFQKASSIYVKKKEGEQVEFSPLAFTVEKLTSGGELMW 240
DB 181 TWTCVTLQNOKKVEFKIDIVLAFQKASSIYVKKKEGEQVEFSPLAFTVEKLTSGGELMW 240
QY 241 QAEERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QAEERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKGLHOEVNLYVMRATQLOKNTCEVWGPTSPKMLSLKLENKEAKVSKKEKPVWV 360
DB 301 LEAKTGKGLHOEVNLYVMRATQLOKNTCEVWGPTSPKMLSLKLENKEAKVSKKEKPVWV 360
QY 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPVHADPKLC 401
DB 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPVHADPKLC 401
```

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RESULT 41
AAR89456
ID AAR89456 standard; protein; 575 AA.
XX
AC AAR89456;
XX
DT 26-SEP-1996 (first entry)
XX
DE CD4:zeta fusion protein.
XX
KW CD7; transmembrane domain; chimeric receptor; CD5; CD34; CH2; CH3; IgG1;
KW human; CD4; HIV; proteinaceous alpha-helix; T cell; B cell; neutrophil;
KW dendritic cell; therapy; mammal; infection.
XX
OS Synthetic.
XX
PN WO9603883-A1.
XX
PD 15-FEB-1996.
XX
PF 26-JUL-1995; 95WO-US009468.
XX
PR 02-AUG-1994; 94US-00284391.
PR 24-FEB-1995; 95US-00394388.
XX
PA (GENO ) GEN HOSPITAL CORP.
XX
PI Seed B, Banapour B, Romeo C, Kolanus W;
XX
DR WPI, 1996-129034/13.
XX
DR N-PSDB; AAT10801.
XX
PT Membrane-bound chimeric receptor comprising extracellular portion
PT including CD4 fragment - cells expressing receptor can be used for
PT treatment of HIV infection.
XX
PS Example 2; Page 77-78; 134pp; English.
XX
CC AAT10801-T10803 represent membrane bound proteinaceous chimeric receptors
CC of the invention. This sequence represents the CD4:zeta chimera. The
CC transmembrane region of the chimeric receptor acts to separate the
CC intracellular and extracellular domains of the chimera, and contains a
CC portion of the CD7 (see AAR89440), CD5 or CD34 transmembrane domains.
CC Alternatively, the extracellular portion of the receptor can be separated
CC from the intracellular domain by the hinge, CH2 and CH3 domains of human
CC IgG1 (see AAR89441). The extracellular portion of the chimeric receptor
CC contains a fragment of CD4 (amino acids 1-394 or 1-200 of the CD4
CC sequence, see AAR89450 and AAR89451) which specifically recognizes and
CC binds HIV-infected cells, but does not mediate HIV infection. The
CC extracellular domain of the receptor is separated from the cell membrane
CC by 48 or 72 angstroms, or by one or more proteinaceous alpha-helices. The
CC cells expressing the receptor are preferably T cells, B cells,
CC neutrophils, or dendritic cells. The therapeutic cells expressing the
CC chimeric receptor are administered to a mammal to treat HIV infection
XX
SQ Sequence 575 AA;

```

```

Query Match 59.7%; Score 2039; DB 2; Length 575;
Best Local Similarity 99.0%; Pred. No. 2,2e-103;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

```

```

QY 1 MNRGVPFRLHLLVLTALPATQGNKVVLGKKGTVELTCTASQKSIQFMKNSNIK 60
DB 1 MNRGVPFRLHLLVLTALPATQGNKVVLGKKGTVELTCTASQKSIQFMKNSNIK 60
QY 61 ILGNQGSFLLTKGPSKLNBRADSRSLMPOGNFLLIKULKTEDSTYICEVEDQKEEYQL 120
DB 61 ILGNQGSFLLTKGPSKLNBRADSRSLMPOGNFLLIKULKTEDSTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDTHTLLQGQSLITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDTHTLLQGQSLITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180

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DB 121 LVFGLTANSDTHTLLQGQSLITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 181 TWICTVLQNKQKVEFKIDIVLAFQKASSIYKKEGQVEFSFPLATFVEKLTGSGELMW 240
DB 181 TWICTVLQNKQKVEFKIDIVLAFQKASSIYKKEGQVEFSFPLATFVEKLTGSGELMW 240
QY 241 QABRASSSSKSWITFDLKNKEVSVRVTQDPKLQNGKKLPHLTLPLQALPOYAGSGNLTIA 300
DB 241 QABRASSSSKSWITFDLKNKEVSVRVTQDPKLQNGKKLPHLTLPLQALPOYAGSGNLTIA 300
QY 301 LEAKTGKLEHENVNVMNRATQLOKNTLCEVWGPTSPKLMSTLKNKEAKVSKREKPVWV 360
DB 301 LEAKTGKLEHENVNVMNRATQLOKNTLCEVWGPTSPKLMSTLKNKEAKVSKREKPVWV 360
QY 361 LNPEAGMWOCILSDSGQVLESNIKVLPWTSTPY--BPKSC 399
DB 361 LNPEAGMWOCILSDSGQVLESNIKVLPWTSTPYHADPKLC 401

RESULT 42
AAM02213
ID AAM02213 standard; protein; 575 AA.
XX
AC AAM02213;
XX
DT 11-NOV-1996 (first entry)
XX
DE CD4:T-cell receptor zeta chain chimeric receptor.
XX
KW Chimeric receptor; cellular immunity; adoptive immunotherapy; CD4;
KW human immunodeficiency virus type 1; HIV-1; AIDS; therapy;
KW T-cell receptor zeta chain; cytotoxic T lymphocyte; CTL.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FH FT 1..393 /label= "Extracellular domain"
FH FT /note= "CD4 extracellular domain"
FH FT 394..396 /label= Linker
FH FT /note= "encoding DNA contains a BamHI site used for
FH FT fusion construction"
FH FT 397..575 /note= "region of fusion derived from zeta chain,
FH FT preferred signal-transducing portions for constructs of
FH FT the invention are amino acids 421-575, 423-255, 438-455,
FH FT 461-494, 494-528, 400-420 and 421-462"
FH FT 400..437 /label= Transmembrane domain
FH FT /label= "zeta chain transmembrane domain"
FH FT 438..575 /label= Intracellular domain
FH FT /note= "zeta chain intracellular domain"
PN PN WO9625953-A1.
XX
PD 29-AUG-1996.
XX
PE 25-JAN-1996; 96WO-US001056.
XX
PR 24-FEB-1995; 95US-00394176.
XX
PA (GENO ) GEN HOSPITAL CORP.
XX
PI Seed B, Romeo C, Kolanus W;
XX
DR WPI, 1996-402134/40.
XX
DR N-PSDB; AAT36758.
XX
PT Direction of cellular immune response using therapeutic cell expressing 2
PT chimeric receptors - comprising region binding to target cell and region
PT that signals target cell destruction, or CD28 region, partic. for

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PT eliminating HIV-infected cells.
XX
PS Claim 7; Page 74-75; 120pp; English.
XX
CC A chimeric receptor (AAW00213) comprises the extracellular domain of an
CC engineered form of the CD4 cellular receptor for HIV and the
CC transmembrane and intracellular regions, including the cytoplasmic signal-
CC transducing portion, of the human T-cell receptor zeta chain; the region
CC of the fusion is shown in AAW0221. It can be obd. by inserting a gene
CC fusion (AAT36758) into a vaccinia virus vector and expression in host
CC cells. Chimeric receptors comprising CD4 fused to zeta, eta (see also
CC AAW02215) or Fc receptor gamma (see also AAW02214) chains are capable of
CC directing cytotoxic T lymphocytes to specifically recognise and kill
CC cells expressing HIV gp120, thus providing a therapy for AIDS
XX
SQ Sequence 575 AA;

Query Match 59.7%; Score 2039; DB 2; Length 575;
Best Local Similarity 99.0%; Pred. No. 2, 2e-103;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 NMRGVFPHLLVLTQALLPATQGNKVLGKKGDTVELTCTASQKKSIOFHMKNSNOIK 60
DB 1 NMRGVFPHLLVLTQALLPATQGNKVLGKKGDTVELTCTASQKKSIOFHMKNSNOIK 60
QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLTIKNLKIEDSDTYICEVEDQKEEYOL 120
DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLTIKNLKIEDSDTYICEVEDQKEEYOL 120
QY 121 LVFGLTANS DTHLLQGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANS DTHLLQGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCTVLONOKKVEFKIDIVLAFOKASSIYKKEGEVBFSPPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLONOKKVEFKIDIVLAFOKASSIYKKEGEVBFSPPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTQDPKLOMGKCLPLHLTLPOALPOYAGSGNLTIA 300
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTQDPKLOMGKCLPLHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKLEHGVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKAQVSKREKPVWV 360
DB 301 LEAKTGKLEHGVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKAQVSKREKPVWV 360
QY 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPVHADPKLC 401
DB 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPVHADPKLC 401

RESULT 43
AAW83140
ID AAW83140 standard; protein; 575 AA.
XX
AC AAW83140;
XX
DT 03-FEB-1999 (first entry)
XX
DE Chimeric receptor containing human zeta polypeptide.
XX
KW Human; zeta; eta; gamma; membrane-bound chimeric receptor; infection;
KW tumor; cancer cell; autoimmune-generated cell; T cell receptor; CD3;
KW CD4; B cell receptor; Fc receptor; pathogen; bacterial; fungal;
KW protozoan; viral.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX US5843728-A.
PN
XX 01-DEC-1998.
PD
XX 05-APR-1995; 95US-00417495.
PF

XX
XX 07-MAR-1991; 91US-00665961.
PR
XX 06-MAR-1992; 92US-00847566.
PR
XX 28-FEB-1994; 94US-00203866.
XX
PA (GEHO) GEN HOSPITAL CORP.
PI
XX Romeo C, Kolanus W, Seed B;
PI
XX WPI; 1999-044582/04.
DR
XX N-PSDB; AAV70156.
XX
PT Membrane-bound chimeric receptors - comprising extracellular portion
PT which recognises and binds a target cell and an intracellular portion of
PT e.g. a T-cell receptor.
XX
XX Example 2; Col 39-42; 57pp; English.
PS
XX The present invention describes DNA encoding a membrane-bound chimeric
XX receptor comprising: (a) an extracellular portion that specifically
XX recognises and binds a target cell or a target infective agent; and (b)
XX an intracellular portion of a T-cell receptor CD3, zeta or eta
XX polypeptide, a B-cell receptor polypeptide or an Fc receptor polypeptide.
XX The present sequence represents a chimeric receptor containing the human
XX zeta polypeptide. Cells expressing chimeric receptors of the present
XX invention can be administered to mammals in order to destroy pathogens
XX (e.g. bacteria, fungi, protozoa or viruses, especially HIV), cancer cells
XX or autoimmune-generated cells
XX
SQ Sequence 575 AA;

Query Match 59.7%; Score 2039; DB 2; Length 575;
Best Local Similarity 99.0%; Pred. No. 2, 2e-103;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 NMRGVFPHLLVLTQALLPATQGNKVLGKKGDTVELTCTASQKKSIOFHMKNSNOIK 60
DB 1 NMRGVFPHLLVLTQALLPATQGNKVLGKKGDTVELTCTASQKKSIOFHMKNSNOIK 60
QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLTIKNLKIEDSDTYICEVEDQKEEYOL 120
DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLTIKNLKIEDSDTYICEVEDQKEEYOL 120
QY 121 LVFGLTANS DTHLLQGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANS DTHLLQGOSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCTVLONOKKVEFKIDIVLAFOKASSIYKKEGEVBFSPPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLONOKKVEFKIDIVLAFOKASSIYKKEGEVBFSPPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTQDPKLOMGKCLPLHLTLPOALPOYAGSGNLTIA 300
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTQDPKLOMGKCLPLHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKLEHGVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKAQVSKREKPVWV 360
DB 301 LEAKTGKLEHGVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKAQVSKREKPVWV 360
QY 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPVHADPKLC 401
DB 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPVHADPKLC 401

RESULT 44
AAB07769
ID AAB07769 standard; protein; 458 AA.
XX
XX AAB07769;
XX
XX 07-NOV-2000 (first entry)
XX
XX DNA encoding a human T4 glycoprotein.
DE

```

XX Human; T4 glycoprotein; human immunodeficiency virus; HIV;
KW envelope glycoprotein; AIDS; virus binding.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Peptide 1..23
XX /note= "leader sequence"
XX Modified-site /note= "298
XX /note= "N-linked glycosylation site"
XX Modified-site /note= "327
XX /note= "N-linked glycosylation site"
XX Domain /note= "398..420
XX /note= "transmembrane domain"
XX Domain /note= "421..458
XX /note= "cytoplasmic domain"
XX
XX US6093539-A.
XX
XX 25-JUL-2000.
XX
XX 06-JUN-1995; 95US-00466368.
XX
XX 21-AUG-1986; 86US-00898587.
XX 11-JUN-1991; 91US-00713564.
XX 06-JUL-1992; 92US-00909021.
XX 12-DEC-1994; 94US-00354452.
XX
XX (UYCO ) UNIV COLUMBIA NEW YORK.
XX
XX Maddon PJ, Chess L, Axel R, Weiss R, McDougal JS, Littman DR;
XX WPI: 2000-505203/45.
XX DR N-PSDB; AAA59352.
XX
XX New isolated nucleic acid encoding a human T cell surface protein and the
XX PT soluble surface T4 glycoprotein that it encodes, useful as prophylaxis
XX PT for treating a subject infected with human acquired immune deficiency
XX PT syndrome virus.
XX
XX Disclosure; Fig 6A-B; 69pp; English.
XX
XX PS The present sequence represents a human T4 glycoprotein. An aqueous-
XX CC soluble polypeptide comprising a portion of a human T4 glycoprotein
XX CC specifically forms a complex with a human immunodeficiency virus (HIV)
XX CC envelope glycoprotein. The DNA is useful for producing the soluble
XX CC surface T4 glycoprotein. The soluble surface T4 glycoprotein is useful as
XX CC a therapeutic agent, i.e. as prophylaxis for treating a subject infected
XX CC with an HIV virus. Thus, the soluble T4 glycoprotein is useful for
XX CC treating human AIDS. The soluble T4 glycoprotein is also useful in
XX CC diagnostic or screening assays, e.g. for screening inhibitors of virus
XX CC binding, or for detecting and quantitating T4, T4+ cells and antibodies
XX CC to T4, which are of diagnostic value for AIDS
XX CC
XX SQ Sequence 458 AA;
XX
XX Query Match 59.7%; Score 2038; DB 3; Length 458;
XX Best Local Similarity 99.7%; Pred. No. 1,9e-103;
XX Matches 395; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 MNRGVPFPHLLLVLLALLPAAATQGNKVVLGKKGDTVELTCTASOKSIOPHMKNSNOIK 60
XX 1 MNRGVPFPHLLLVLLALLPAAATQGNKVVLGKKGDTVELTCTASOKSIOPHMKNSNOIK 60
XX 61 ILGNQSFRTKSPKSLNDRADSRSLWQGNFPLIKNLIKIEDSDTYICEVEDQKEVQL 120
XX 61 ILGNQSFRTKSPKSLNDRADSRSLWQGNFPLIKNLIKIEDSDTYICEVEDQKEVQL 120
XX 61 ILGNQSFRTKSPKSLNDRADSRSLWQGNFPLIKNLIKIEDSDTYICEVEDQKEVQL 120
XX 121 LVFGITANSDFHLLQGGSLITLSPSSSPVQCRSRGKNIQGGKTLSTVQLDQSG 180
XX 121 LVFGITANSDFHLLQGGSLITLSPSSSPVQCRSRGKNIQGGKTLSTVQLDQSG 180
XX 121 LVFGITANSDFHLLQGGSLITLSPSSSPVQCRSRGKNIQGGKTLSTVQLDQSG 180
XX 121 LVFGITANSDFHLLQGGSLITLSPSSSPVQCRSRGKNIQGGKTLSTVQLDQSG 180
XX

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QY 181 TWICTVLQNOCKVEFKIDIVVLAPOKASSIVYKKEGQVESPFLATVTEKLTSGGELMW 240
DQ 181 TWICTVLQNOCKVEFKIDIVVLAPOKASSIVYKKEGQVESPFLATVTEKLTSGGELMW 240
QY 241 QAEKASSKSMITFDLKNKESVYRVQDPKLOMGKLPPLHTLPOLPOYAGSGNLTIA 300
DQ 241 QAEKASSKSMITFDLKNKESVYRVQDPKLOMGKLPPLHTLPOLPOYAGSGNLTIA 300
QY 301 LEAKTGLHOEVNLVVRATQLOKNLTCEVWGPSTPMLMTSLKLENKAKVSKREKPVW 360
DQ 301 LEAKTGLHOEVNLVVRATQLOKNLTCEVWGPSTPMLMTSLKLENKAKVSKREKPVW 360
QY 361 LNPAGMWQCILSDSGVLLSNIKVLPWTSTPEVP 396
DQ 361 LNPAGMWQCILSDSGVLLSNIKVLPWTSTPEVP 396

RESULT 45
AAR27277
ID AAR27277 standard; protein; 462 AA.
XX
XX AAR27277;
XX
XX 25-MAR-2003 (revised)
XX DT 28-JUL-1995 (first entry)
XX
XX CD4:eta peptide chimeric protein.
XX
XX Fusion protein; CD4; extracellular domain; zeta; eta; gamma;
XX KW membrane spanning domain; intracellular domain; type I;
XX KW integral membrane homodimer; TCR; T cell antigen receptor;
XX KW extracellular domain; mouse; human; receptor; chimera;
XX HPB-ALL tumour cell line; natural killer cell.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX FH 1..399
XX FT /note= "CD4 extracellular domain"
XX FT 400..462
XX FT Protein /note= "Zeta membrane spanning and intracellular domain"
XX
XX W09215322-A1.
XX
XX 17-SEP-1992.
XX PD 06-MAR-1992; 92MO-US001785.
XX PR 07-MAR-1991; 91US-00665961.
XX
XX (GEHO ) GEN HOSPITAL CORP.
XX
XX Seed B, Romeo C, Kolanus W;
XX
XX WPI: 1992-331474/40.
XX DR N-PSDB; AAQ28705.
XX
XX Therapeutic cells expressing chimeric receptors - directing cellular
XX PT response to an infective agent, useful in treating HIV-1, AIDS
XX PT Pneumocystis carinii infections etc.
XX
XX Example 2; Page 73-74; 114pp; English.
XX
XX This sequence represents a fusion protein between the CD4 extracellular
XX CC domain and the eta protein membrane spanning domain and intracellular
XX CC domain. Eta is an isoform of zeta (see also AAR27276) which is a 32 kD
XX CC type I integral membrane homodimer, which arises by alternate mRNA
XX CC splicing. It is present in reduced amounts in cells expressing the T cell
XX CC antigen receptor. Zeta-eta heterodimers are thought to mediate the
XX CC formation of inositol phosphates, as well as the receptor initiated cell
XX CC death called apoptosis. In the production of the CD4 receptor chimera,
XX CC the eta cDNA was isolated from the HPB-ALL tumour cell line and from
XX CC human natural killer cells. The eta cDNA was joined to the extracellular

```

CC domain of an engineered form of CD4 possessing a BamHI site just upstream
 CC of the membrane spanning domain, by a BamHI site naturally present a few
 CC residues upstream of the membrane spanning domain. (Updated on 25-MAR-
 CC 2003 to correct PN field.)

XX SQ Sequence 462 AA;

Query Match 59.6%; Score 2035; DB 2; Length 462;
 Best Local Similarity 98.8%; Pred. No. 2.9e-103;
 Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

```

QY 1 MNRGVFPHLLLVLOALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
DB 1 MNRGVFPHLLLVLOALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
QY 61 ILGNQGSFLTKGPKSLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQGSFLTKGPKSLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDBTHLQGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDBTHLQGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYVKEGEQVEFSFPLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYVKEGEQVEFSFPLAFVTEKLTGSGELMW 240
QY 241 QABRASSSKSWITFDLKNKEVSVKRVTDPKLOMKKPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QABRASSSKSWITFDLKNKEVSVKRVTDPKLOMKKPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKGLHQBENLVVMBRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVWV 360
DB 301 LEAKTGKGLHQBENLVVMBRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVWV 360
QY 361 LNPEAGMOCCLSDSGQVLLBSNIVKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMOCCLSDSGQVLLBSNIVKVLPTWSTPVHADPOLC 401

```

RESULT 46
 AAR78677
 ID AAR78677 standard; protein; 462 AA.
 XX
 AC AAR78677;
 XX
 DT 16-APR-1996 (first entry)
 XX
 DE T-cell receptor gamma.
 XX
 KM Chimeric receptor; CD4; T-cell receptor gamma; HIV; cytolysis;
 KW human immunodeficiency virus; adoptive immunotherapy.
 OS Homo sapiens.
 XX
 PN MO9521528-A1.
 XX
 PD 17-AUG-1995.
 XX
 PF 12-JAN-1995; 95WO-US000454.
 XX
 PR 14-FEB-1994; 94US-00195395.
 XX
 PA 02-AUG-1994; 94US-00284391.
 XX
 PA (GEHO) GEN HOSPITAL CORP.
 XX
 PI Seed B, Banapour B, Romeo C, Kolanus W;
 XX
 DR WPI; 1995-282893/38.
 XX
 DR P-PSDB; AA096123.
 XX
 PT Target cytolysis of HIV-infected cells - by chimeric CD4 receptor-bearing
 PT cell.

XX XX Example 2; Page 77-78; 118pp; English.

XX CC Fusion proteins comprising the extracellular domain of CD4 fused to T-
 XX CC cell receptor zeta, gamma or eta (AAR78676-78, respectively) were
 CC expressed in CV1 using a vaccine virus vector. These CD4:zeta, CD4:gamma
 CC and CD4:eta chimeric receptors mediated cytolysis of targets expressing
 CC HIV gp120/41

XX SQ Sequence 462 AA;

Query Match 59.6%; Score 2035; DB 2; Length 462;
 Best Local Similarity 98.8%; Pred. No. 2.9e-103;
 Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

```

QY 1 MNRGVFPHLLLVLOALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
DB 1 MNRGVFPHLLLVLOALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
QY 61 ILGNQGSFLTKGPKSLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQGSFLTKGPKSLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDBTHLQGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDBTHLQGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYVKEGEQVEFSFPLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYVKEGEQVEFSFPLAFVTEKLTGSGELMW 240
QY 241 QABRASSSKSWITFDLKNKEVSVKRVTDPKLOMKKPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QABRASSSKSWITFDLKNKEVSVKRVTDPKLOMKKPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKGLHQBENLVVMBRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVWV 360
DB 301 LEAKTGKGLHQBENLVVMBRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVWV 360
QY 361 LNPEAGMOCCLSDSGQVLLBSNIVKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMOCCLSDSGQVLLBSNIVKVLPTWSTPVHADPOLC 401

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RESULT 47
 AAR89457
 ID AAR89457 standard; protein; 462 AA.
 XX
 AC AAR89457;
 XX
 DT 26-SEP-1996 (first entry)
 XX
 DE CD4:gamma fusion protein.
 XX
 KM CD7; transmembrane domain; chimeric receptor; CD5; CD34; CH2; CH3; IgG1;
 KW human; CD4; HIV; proteinaceous alpha-helix; T cell; B cell; neutrophil;
 KW dendritic cell; therapy; mammal; infection.
 OS Synthetic.
 XX
 PN MO9603883-A1.
 XX
 PD 15-FEB-1996.
 XX
 PF 26-JUL-1995; 95WO-US009468.
 XX
 PR 02-AUG-1994; 94US-00284391.
 XX
 PA 24-FEB-1995; 95US-00394388.
 XX
 PA (GEHO) GEN HOSPITAL CORP.
 XX
 PI Seed B, Banapour B, Romeo C, Kolanus W;
 XX

QY 241 QAEKSSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLA 300
 DB 241 QAEKSSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLA 300
 QY 301 LEAKTGKLGHOEVLVVMRATQLOKNTLCEVWGPTSPKMLSLKLNKEAKVSKREKPVWV 360
 DB 301 LEAKTGKLGHOEVLVVMRATQLOKNTLCEVWGPTSPKMLSLKLNKEAKVSKREKPVWV 360
 QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVAHADQLC 401
 DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVAHADQLC 401

RESULT 49

AAW83142
 ID AAW83142 standard; protein; 462 AA.
 AC AAW83142;
 XX
 DT 03-FEB-1999 (first entry)
 XX
 DE Chimeric receptor containing mouse gamma polypeptide.
 XX
 KW Human; zeta; eta; gamma; membrane-bound chimeric receptor; infection;
 KW tumour; cancer cell; autoimmune-generated cell; T cell receptor; CD3;
 KW CD4; B cell receptor; Fc receptor; pathogen; bacterial; fungal;
 KW protozoan; viral.

OS Synthetic.
 OS Mus sp.

PN US5843728-A.

PD 01-DEC-1998.

PF 05-APR-1995; 95US-00417495.

PR 07-MAR-1991; 91US-00665961.

PR 06-MAR-1992; 92US-00847566.

PR 28-FEB-1994; 94US-00203866.

PA (GEHO) GEN HOSPITAL CORP.

PI Romeo C, Kolanus W, Seed B;

DR WPI; 1999-044582/04.

DR N-PSDB; AAV70158.

PT Membrane-bound chimeric receptors - comprising extracellular portion
 PT which recognises and binds a target cell and an intracellular portion of
 PT e.g. a T-cell receptor.

PS Example 2; Col 43-46; 57pp; English.

XX The present invention describes DNA encoding a membrane-bound chimeric
 CC receptor comprising: (a) an extracellular portion that specifically
 CC recognises and binds a target cell or a target infective agent; and (b)
 CC an intracellular portion of a T-cell receptor CD3, zeta or eta
 CC polypeptide, a B-cell receptor polypeptide or an Fc receptor polypeptide.
 CC The present sequence represents a chimeric receptor containing the mouse
 CC gamma polypeptide. Cells expressing chimeric receptors of the present
 CC invention can be administered to mammals in order to destroy pathogens
 CC (e.g. bacteria, fungi, protozoa or viruses, especially HIV), cancer cells
 CC or autoimmune-generated cells

Query Match 59.6%; Score 2035; DB 2; Length 462;

Best Local Similarity 98.8%; Pred. No. 2.9e-103;
 Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

QY 1 NMRGVFRRLLVLQALLPAATQGNKVLGKKGDTVELTCTASQKSIQPFMKNSNQIX 60

DB 1 NMRGVFRRLLVLQALLPAATQGNKVLGKKGDTVELTCTASQKSIQPFMKNSNQIX 60
 QY 61 ILGNQGSFLTKPSPKLNDRADSRSLMDQGNPLIILKULKIEDSTTYICEVDQKEEYQL 120
 DB 61 ILGNQGSFLTKPSPKLNDRADSRSLMDQGNPLIILKULKIEDSTTYICEVDQKEEYQL 120
 QY 121 LVFGTLTANSDDTLHLOGQSLITLLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGTLTANSDDTLHLOGQSLITLLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWTCTVLQNKQKVEFKIDIVLAFQKASSIVYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
 DB 181 TWTCTVLQNKQKVEFKIDIVLAFQKASSIVYKKEGEQVEFSPLAFTVEKLTGSGELMW 240
 QY 241 QAEKSSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLA 300
 DB 241 QAEKSSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLA 300
 QY 301 LEAKTGKLGHOEVLVVMRATQLOKNTLCEVWGPTSPKMLSLKLNKEAKVSKREKPVWV 360
 DB 301 LEAKTGKLGHOEVLVVMRATQLOKNTLCEVWGPTSPKMLSLKLNKEAKVSKREKPVWV 360
 QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVAHADQLC 401
 DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVAHADQLC 401

RESULT 50

AAW02215
 ID AAW02215 standard; protein; 532 AA.

AC AAW02215;

DT 16-OCT-2003 (revised)

DT 11-NOV-1996 (first entry)

DE CD4:T-cell receptor eta chain chimeric receptor.

KW Chimeric receptor; cellular immunity; adoptive immunotherapy; CD4;
 KW human immunodeficiency virus type 1; HIV-1; AIDS; therapy;

KW T-cell receptor eta chain; cytotoxic T lymphocyte; CTL.

OS Homo: sapiens.

OS Mus sp.

OS Chimeric.

PH Key

FT Domain

FT Region

FT Region

FT Domain

FT Domain

FT Domain

FT Domain

PN W09625953-A1.

PD 29-AUG-1996.

PF 25-JAN-1996; 96WO-US001056.

Location/Qualifiers
 1..393
 /label= Extracellular domain
 /note= "CD4 extracellular domain"
 394..396
 /label= Linker
 /note= "encoding DNA contains a BamHI site used for
 fusion construction"
 397..532
 /note= "region of fusion derived from eta chain,
 preferred signal-transducing portions for constructs of
 the invention are amino acids 421-532, 423-455, 438-455,
 400..437
 /label= Transmembrane domain
 /note= "eta chain transmembrane domain"
 438..575
 /label= Intracellular domain
 /note= "eta chain intracellular domain"

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PR 24-FEB-1995; 95US-00394176.
XX
XX (GEOH ) GEN HOSPITAL CORP.
XX
XX Seed B, Romeo C, Kolanus W;
XX
XX WPI; 1996-402134/40.
XX N-PSDB; AAT36760.
XX
XX Direction of cellular immune response using therapeutic cell expressing 2
XX chimaeric receptors - comprising region binding to target cell and region
XX that signals target cell destruction, or CD28 region, partic. for
XX eliminating HIV-infected cells.
XX
XX Claim 7; Page 77-78; 120pp; English.
XX
XX A chimeric receptor (AAW00215) comprises the extracellular domain of an
XX engineered form of the CD4 cellular receptor for HIV and the
XX transmembrane and intracellular regions, including the cytolitic signal-
XX transducing portion, of the mouse T-cell receptor eta chain. It can be
XX obtd. by inserting a gene fusion (AAT36760) into a vaccinia virus vector
XX and expression in host cells. Chimaeric receptors comprising CD4 fused to
XX eta (see also AAW02213) or Fc receptor gamma (see also AAW02214)
XX chains are capable of directing cytotoxic T lymphocytes to specifically
XX recognise and kill cells expressing HIV gp120, thus providing a therapy
XX for AIDS. (updated on 16-OCT-2003 to standardise OS field)
XX
XX Sequence 532 AA;
SQ
Query Match 59.6%; Score 2035; DB 2; Length 532;
Best Local Similarity 98.8%; Pred. No. 3.3e-103;
Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;
QY 1 MNRGVPFRHLVLTQALLPAATQGNKVVLGKGDVTELTCTASOKSIOFHMKNNSQIK 60
DB 1 MNRGVPFRHLVLTQALLPAATQGNKVVLGKGDVTELTCTASOKSIOFHMKNNSQIK 60
QY ILNGGSFLLTKGSPSKLNDRADSRSLMDQGNFPLIINKLTIEDSDTYICEVEDQKEEYOL 120
DB ILNGGSFLLTKGSPSKLNDRADSRSLMDQGNFPLIINKLTIEDSDTYICEVEDQKEEYOL 120
QY LVFGILTANSDTHLLOGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
DB LVFGILTANSDTHLLOGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
QY LVFGILTANSDTHLLOGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
DB LVFGILTANSDTHLLOGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
QY TWICTVLOKQKVEFKIDIVVLAFOKASSIVYKKEGQVESPFLAFTVEKLTSSGELMW 240
DB TWICTVLOKQKVEFKIDIVVLAFOKASSIVYKKEGQVESPFLAFTVEKLTSSGELMW 240
QY QABRASSSSKSMITFDLKNKEVSVKRVTDPKLOMGKPLHLTLPOALPOYAGSGNLTLA 300
DB QABRASSSSKSMITFDLKNKEVSVKRVTDPKLOMGKPLHLTLPOALPOYAGSGNLTLA 300
QY QABRASSSSKSMITFDLKNKEVSVKRVTDPKLOMGKPLHLTLPOALPOYAGSGNLTLA 300
DB QABRASSSSKSMITFDLKNKEVSVKRVTDPKLOMGKPLHLTLPOALPOYAGSGNLTLA 300
QY LEAKTGKILHOEVNVLVVMRATQLOKMLTCEVWGPTSPKMLSLIKENKEAKVSKKEKPVW 360
DB LEAKTGKILHOEVNVLVVMRATQLOKMLTCEVWGPTSPKMLSLIKENKEAKVSKKEKPVW 360
QY LNPEAGMQCLLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
DB LNPEAGMQCLLSDSGOVLLESNIKVLPTWSTPVADPQLC 401
RESULT 51
AAR06374
ID AAR06374 standard; protein; 400 AA.
XX
XX AAR06374;
AC
XX
XX 31-OCT-2002 (revised)
DT 20-DEC-1990 (first entry)
XX
XX Truncated form of soluble T4 encoded by PBG381.
XX

```

```

KW plasmid PBG381; soluble T4 protein; AIDS; ARC; HIV.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
XX Peptide 1..23
XX /label= "secretory signal"
XX /note= "hydrophobic"
XX Region 24..117
XX /label= "extracellular"
XX Region 118..132
XX /note= "homology to V-regions"
XX Region /label= "extracellular"
XX /note= "homology to J-regions"
XX Region 133..397
XX /label= "extracellular"
XX /note= "glycosylated"
XX
XX MO9008198-A.
XX
XX 26-JUL-1990.
XX
XX 18-JAN-1989; 89US-00300096.
XX
XX 18-JAN-1989; 89US-00300096.
XX
XX (HARD ) HARVARD COLLEGE.
XX
XX Letvin NA.
XX
XX WPI; 1990-254040/33.
XX N-PSDB; AAQ05608.
XX
XX Treating or preventing AIDS, ARC or HIV infection - by administering an
XX immunologically effective amt. of soluble T4 protein.
XX
XX Disclosure; Fig 2; 121pp; English.
XX
XX T4-encoding plasmid PBG381 was used to transform Chinese Hamster Ovary
XX cells for the production of truncated T4. Soluble T4 is produced by
XX virtue of the removal of the transmembrane and cytoplasmic domains. The
XX soluble forms may be modified to increase their immunogenicity by
XX addition of an adjuvant such as incomplete Freund's adjuvant. The T4
XX interferes with HIV/T4 interaction and elicits anti-soluble T4 antibody
XX production. See also AAQ05607. (Updated on 31-OCT-2002 to add missing OS
XX field.)
XX
XX Sequence 400 AA;
SQ
Query Match 59.5%; Score 2030; DB 2; Length 400;
Best Local Similarity 99.5%; Pred. No. 4.6e-103;
Matches 394; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1 MNRGVPFRHLVLTQALLPAATQGNKVVLGKGDVTELTCTASOKSIOFHMKNNSQIK 60
DB 1 MNRGVPFRHLVLTQALLPAATQGNKVVLGKGDVTELTCTASOKSIOFHMKNNSQIK 60
QY ILNGGSFLLTKGSPSKLNDRADSRSLMDQGNFPLIINKLTIEDSDTYICEVEDQKEEYOL 120
DB ILNGGSFLLTKGSPSKLNDRADSRSLMDQGNFPLIINKLTIEDSDTYICEVEDQKEEYOL 120
QY LVFGILTANSDTHLLOGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
DB LVFGILTANSDTHLLOGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
QY LVFGILTANSDTHLLOGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
DB LVFGILTANSDTHLLOGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
QY TWICTVLOKQKVEFKIDIVVLAFOKASSIVYKKEGQVESPFLAFTVEKLTSSGELMW 240
DB TWICTVLOKQKVEFKIDIVVLAFOKASSIVYKKEGQVESPFLAFTVEKLTSSGELMW 240
QY QABRASSSSKSMITFDLKNKEVSVKRVTDPKLOMGKPLHLTLPOALPOYAGSGNLTLA 300
DB QABRASSSSKSMITFDLKNKEVSVKRVTDPKLOMGKPLHLTLPOALPOYAGSGNLTLA 300

```


FT Domain 421. .458
XX
XX EP30227-A.
PN
PD 30-AUG-1989.
XX
XX 24-FEB-1989; 89EP-00103297.
XX
XX 24-FEB-1988; 88US-00160348.
XX
XX (UYCO-) COLUMBIA UNIV.
PA (SMK) SMITHKLINE BECKMAN CORP.
PA (UYCO) UNIV COLUMBIA NEW YORK.
PA (UYCO) UNIV COLUMBIA NEW YORK.
XX
PI Maddon PJ, Axel R, Sweet RW, Arthos J;
XX
XX WPI; 1989-250337/35.
XX
XX Soluble T4 polypeptide derivs. - inhibitors of extracellular and cell to
PT cell spread of HIV used in prevention and treatment of AIDS.
XX
PS Claim 1; Fig 6; 73pp; English.

XX T4 protein (AAN90619) inhibits extracellular and cell-to-cell spread of
CC HIV. The therapeutic agent consists of amino acids +3--185 fused to +351-
CC +369; +3--106 fused to +351--369; or +3--185. Also used to identify
CC inhibitors of T4 interactions, as target carrier proteins, and to
CC generate monoclonal antibodies. Above features are: Domain 1 (D, starting
CC at the N-terminal) = leader; D2 = variable-like-1; D3 = joining-like-1;
CC D4 = V2; D5 = J2; D6 = V3; D7 = V4; D8 = J4; D9 = transmembrane;
CC D10 = cytoplasmic; Regions are extracellular cysteines; and the 2 sites
CC are potential N-linked glycosylation sites. (Updated on 25-MAR-2003 to
CC correct PA field.) (Updated on 24-OCT-2003 to standardise OS field)

XX Sequence 458 AA;

Query Match 59.5%; Score 2030; DB 1; Length 458;
Best Local Similarity 99.5%; Pred. No. 5.3e-103;
Matches 394; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 MNRGVPFRHLLVLTQALLPRAATQGNKVVLGKGGDTVELTCTASQKSIQFHMKNNSNOIK 60
DB 1 MNRGVPFRHLLVLTQALLPRAATQGNKVVLGKGGDTVELTCTASQKSIQFHMKNNSNOIK 60
QY 61 ILNGGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEVQL 120
DB 61 ILNGGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEVQL 120
QY 121 LVFGLTANSPTHLLQGGSLTTLTLESPGSSPSVQCRSPRKNIOGKTLVSQLELDSG 180
DB 121 LVFGLTANSPTHLLQGGSLTTLTLESPGSSPSVQCRSPRKNIOGKTLVSQLELDSG 180
QY 181 TWTCVLTQNOKKVEFKIDIVLAFOKASSIYKKEGEOVEFSPLAFTVEKLTSGGELMW 240
DB 181 TWTCVLTQNOKKVEFKIDIVLAFOKASSIYKKEGEOVEFSPLAFTVEKLTSGGELMW 240
QY 241 QABRASSSKSWITFDLKNKEVSVKRVTPQPKLQMGKKLPLHLITLPQALPOYAGSGNLTILA 300
DB 241 QABRASSSKSWITFDLKNKEVSVKRVTPQPKLQMGKKLPLHLITLPQALPOYAGSGNLTILA 300
QY 301 LEAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKEAKVSKKEKPYW 360
DB 301 LEAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKEAKVSKKEKPYW 360
QY 361 LNPEAGMWQCLISDSGCVLLSNNIKVLPWTSTPVP 396
DB 361 LNPEAGMWQCLISDSGCVLLSNNIKVLPWTSTPVP 396

RESULT 54
AAV39826
ID AAV39826 standard; protein; 458 AA.

XX
AC AAV39826;
XX
XX 03-DEC-1999 (first entry)
DT
XX
XX Soluble human T4 protein.
DE
XX
XX Soluble T4 protein; gT4; human; HIV; binding inhibitor; T4+ cell; AIDS;
KW vaccine; immunisation; therapy.
XX
XX Homo sapiens.
OS
XX
XX US5958678-A.
PN
XX
XX 28-SEP-1999.
PD
XX
XX 12-DEC-1994; 94US-00354452.
PF
XX
XX 21-AUG-1986; 86US-00898587.
PR
XX 11-JUN-1991; 91US-00713564.
PR
XX 06-JUL-1992; 92US-00909021.
XX
XX (UYCO) UNIV COLUMBIA NEW YORK.
PA
XX
XX McDougal JS, Weiss R, Axel R, Littman DR, Maddon PJ, Chess L;
PI
XX
XX WPI; 1999-561025/47.
XX
XX N-PSDB; AAZ20695.
DR
XX
XX Human T4 protein inhibits HIV binding to T4 cells, useful for treating
PT AIDS.
XX
XX Example 3; Fig 6; 58pp; English.

XX This sequence represents the soluble human T4 protein of the invention.
CC The soluble human T4 protein blocks the binding of HIV to T4+ cells and
CC is therefore useful for the treatment of AIDS. Monoclonal antibodies
CC against the T4 protein may be used as vaccines for immunising subjects
CC against AIDS

XX Sequence 458 AA;

Query Match 59.5%; Score 2030; DB 2; Length 458;
Best Local Similarity 99.5%; Pred. No. 5.3e-103;
Matches 394; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 MNRGVPFRHLLVLTQALLPRAATQGNKVVLGKGGDTVELTCTASQKSIQFHMKNNSNOIK 60
DB 1 MNRGVPFRHLLVLTQALLPRAATQGNKVVLGKGGDTVELTCTASQKSIQFHMKNNSNOIK 60
QY 61 ILNGGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEVQL 120
DB 61 ILNGGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEVQL 120
QY 121 LVFGLTANSPTHLLQGGSLTTLTLESPGSSPSVQCRSPRKNIOGKTLVSQLELDSG 180
DB 121 LVFGLTANSPTHLLQGGSLTTLTLESPGSSPSVQCRSPRKNIOGKTLVSQLELDSG 180
QY 181 TWTCVLTQNOKKVEFKIDIVLAFOKASSIYKKEGEOVEFSPLAFTVEKLTSGGELMW 240
DB 181 TWTCVLTQNOKKVEFKIDIVLAFOKASSIYKKEGEOVEFSPLAFTVEKLTSGGELMW 240
QY 241 QABRASSSKSWITFDLKNKEVSVKRVTPQPKLQMGKKLPLHLITLPQALPOYAGSGNLTILA 300
DB 241 QABRASSSKSWITFDLKNKEVSVKRVTPQPKLQMGKKLPLHLITLPQALPOYAGSGNLTILA 300
QY 301 LEAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKEAKVSKKEKPYW 360
DB 301 LEAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKEAKVSKKEKPYW 360
QY 361 LNPEAGMWQCLISDSGCVLLSNNIKVLPWTSTPVP 396
DB 361 LNPEAGMWQCLISDSGCVLLSNNIKVLPWTSTPVP 396

RESULT 55
 AAR04032
 ID AAR04032 standard; protein; 2037 AA.
 XX
 AC AAR04032;
 XX
 DT 25-MAR-2003 (revised)
 DT 31-OCT-2002 (revised)
 DT 29-MAY-1990 (first entry)
 DE Full length T4 encoded by plasmid pBG381.
 XX
 DE Soluble T4; pBG381; anti-retroviral agent; AIDS; ARC; HIV; AZT.
 XX
 OS Synthetic.
 XX
 PN WO8911860-A.
 XX
 PD 14-DEC-1989.
 XX
 PF 08-JUN-1989; 89WO-US002453.
 XX
 PR 10-JUN-1988; 88US-00204645.
 PR 20-APR-1989; 89US-00341080.
 XX
 PA (BIOJ) BIOGEN NV INC.
 PA (GENO) GEN HOSPITAL CORP.
 PA (BIOJ) BIOGEN INC.
 PA (BIOJ) BIOGEN INC.
 XX
 PI Fisher RA, Schooley RT, Hirsch MS, Johnson VA, Walker BD;
 XX
 DR WPI; 1990-007302/01.
 DR N-PSDB; AAQ03006.
 XX
 PT Combinations of soluble T4 protein and anti-retroviral agent - having
 PT synergistic activity in treatment and prevention of AIDS, arc and HIV
 PT infection.
 XX
 PS Disclosure; Fig 2; 100pp; English.
 XX
 CC X = stop codon. The sequence was deduced from the cDNA insert of pBG183.
 CC Soluble T4 constructs may be produced by truncating this sequence to give
 CC fragments from position 400 to 799; removing the transmembrane and
 CC intracytoplasmic domain whilst retaining the extracellular region
 CC responsible for HIV binding. The sol. T4 is combined with an anti-viral
 CC agent such as AZT. See also AAQ03005. (Updated on 31-OCT-2002 to add
 CC missing OS field.) (Updated on 25-MAR-2003 to correct PA field.)
 CC
 XX
 SQ Sequence 2037 AA;
 Query Match 59.5%; Score 2030; DB 2; Length 2037;
 Best Local Similarity 99.5%; Pred. No. 2.6e-102;
 Matches 394; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 1 MNRGVPRHLLLVQLALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
 DB 403 MNRGVPRHLLLVQLALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 462
 QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDGNFPLTIKNIKIDSPTVYICEVEDQKEEVQL 120
 DB 463 ILGNQGSFLTKGPSKLNDRADSRSLMDGNFPLTIKNIKIDSPTVYICEVEDQKEEVQL 522
 QY 121 LVFGLTANSDBTHLQOSQSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLTSSQLBLQDSG 180
 DB 523 LVFGLTANSDBTHLQOSQSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLTSSQLBLQDSG 582
 QY 181 TWTCTVLQKQKVEKIDIVLAFQVASSIVYKKEGEQVEFSPPLAFTVEKLTGSGELMW 240
 DB 583 TWTCTVLQKQKVEKIDIVLAFQVASSIVYKKEGEQVEFSPPLAFTVEKLTGSGELMW 642

QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPPKLOMGKKLPLHLTLPLQALPOYAGSGLTLTA 300
 DB 643 QAERASSSKSWITFDLKNKEVSVKRVTDPPKLOMGKKLPLHLTLPLQALPOYAGSGLTLTA 702
 QY 301 LEAKTGKLHGEVNLVVMRATOLQXNLTCFVWGPTSPKIMLSIKLENKEAKVSKREKPYVV 360
 DB 703 LEAKTGKLHGEVNLVVMRATOLQXNLTCFVWGPTSPKIMLSIKLENKEAKVSKREKAVVV 762
 QY 361 LNPEAGMWOCCLSDSGOVLLESNTIKVLPWTSTPVP 396
 DB 763 LNPEAGMWOCCLSDSGOVLLESNTIKVLPWTSTPVP 798
 RESULT 56
 AAR07641
 ID AAR07641 standard; protein; 2050 AA.
 XX
 AC AAR07641;
 XX
 DT 31-OCT-2002 (revised)
 DT 20-DEC-1990 (first entry)
 DE Deduced sequence of pBG381 comprising truncated T4 glycoprotein.
 XX
 DE plasmid pBG381; soluble T4 protein; AIDS; ARC; HIV.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Protein 403..803
 FT /label= truncated soluble T4 glycoprotein
 XX
 PN WO9008198-A.
 XX
 PD 26-JUL-1990.
 XX
 PF 18-JAN-1989; 89US-00300096.
 XX
 PR 18-JAN-1989; 89US-00300096.
 XX
 PA (HARD) HARVARD COLLEGE.
 PI Letvin NA;
 XX
 DR WPI; 1990-254040/33.
 DR N-PSDB; AAQ05608.
 XX
 PT Treating or preventing AIDS, ARC or HIV infection - by administering an
 PT immunologically effective amt. of soluble T4 protein.
 XX
 PS Disclosure; Fig 2; 121pp; English.
 XX
 CC Entire sequence translation of plasmid pBG381 used to transform Chinese
 CC Hamster Ovary cells for the production of soluble truncated T4.
 CC Transmembrane and cytoplasmic domain-encoding regions are deleted from
 CC the T4 CDS to encode a truncated protein. The soluble forms may be
 CC modified to increase their immunogenicity by addition of an adjuvant such
 CC as incomplete Freund's adjuvant. The T4 interferes with HIV/T4
 CC interaction and elicits anti-soluble T4 antibody prodn. See also
 CC AAQ05607. (Updated on 31-OCT-2002 to add missing OS field.)
 CC
 XX
 SQ Sequence 2050 AA;
 Query Match 59.5%; Score 2030; DB 2; Length 2050;
 Best Local Similarity 99.5%; Pred. No. 2.6e-102;
 Matches 394; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 1 MNRGVPRHLLLVQLALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
 DB 403 MNRGVPRHLLLVQLALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 462
 QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDGNFPLTIKNIKIDSPTVYICEVEDQKEEVQL 120

```

Db      463 ILNGGSFLTKGSPKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVQL 522
Oy      121 LVFGLTANSDTHLLQGSLTLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Cc      523 LVFGLTANSDTHLLQGSLTLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 582
Db      181 TWTCVTVLQNKQKVEFKIDIVVLAFOKASSIYKKKEGVESFPPLAFTVEKLTGSGELMW 240
Oy      583 TWTCVTVLQNKQKVEFKIDIVVLAFOKASSIYKKKEGVESFPPLAFTVEKLTGSGELMW 642
Db      241 QAERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPLHLTLPOALPOYAGSGNLTTLA 300
Oy      643 QAERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPLHLTLPOALPOYAGSGNLTTLA 702
Db      301 LEAKTGKHOEVLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWV 360
Oy      703 LEAKTGKHOEVLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWV 762
Oy      361 LNPEAGMWQCLLSDSGVLLSNTIKVLPWTSTPVP 396
Db      763 LNPEAGMWQCLLSDSGVLLSNTIKVLPWTSTPVP 798

```

RESULT 57

AAR89450 standard; peptide; 398 AA.

AAR89450;

26-SEP-1996 (first entry)

CD4 D1-D4 domains.

CD7; transmembrane domain; chimeric receptor; CD5; CD34; CH2; CH3; IgG1; human; CD4; HIV; proteinaceous alpha-helix; T cell; B cell; neutrophil; dendritic cell; therapy; mammal; infection.

Homo sapiens.

MO9603883-A1.

15-FEB-1996.

26-JUL-1995; 95MO-US009468.

02-AUG-1994; 94US-00284391.

24-FEB-1995; 95US-00394388.

(GEHO) GEN HOSPITAL CORP.

Seed B, Banapour B, Romeo C, Kolanus W;

WPI, 1996-129034/13.

N-PSDB; AAT10797.

Membrane-bound chimeric receptor comprising extracellular portion including CD4 fragment - cells expressing receptor can be used for treatment of HIV infection.

Example 10; Fig 23; 134pp; English.

This sequence represents the D1-D4 domains of CD4. This sequence is included in the membrane bound proteinaceous chimeric receptor of the invention. The extracellular portion of the chimeric receptor contains a fragment of CD4 (amino acids 1-394 or 1-200 of the CD4 sequence) which specifically recognizes and binds HIV-infected cells, but does not mediate HIV infection. The extracellular domain of the receptor is separated from the cell membrane by 48 or 72 angstroms, or by one or more proteinaceous alpha-helices. The transmembrane region of the chimeric receptor contains a portion of the CD7, CD5 or CD34 transmembrane domain. Alternatively, the extracellular portion of the receptor can also be separated from the intracellular domain by the hinge, CH2 and CH3 domains of human IgG1. The cells expressing the receptor are preferably T cells,

CC B cells, neutrophils, or dendritic cells. The therapeutic cells
CC expressing the chimeric receptor are administered to a mammal to treat
CC HIV infection
XX
XX
SQ Sequence 398 AA;

Query Match 59.4%; Score 2029; DB 2; Length 398;
Best Local Similarity 100.0%; Pred. No. 5, 2e-103;
Matches 394; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

Oy      1 MNRGVPRHLLVYLQALLPAATQGNKVYGGKGDYELTCTASQKSIQFMKNSNOIK 60
Db      1 MNRGVPRHLLVYLQALLPAATQGNKVYGGKGDYELTCTASQKSIQFMKNSNOIK 60
Oy      61 ILNGGSFLTKGSPKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVQL 120
Db      61 ILNGGSFLTKGSPKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVQL 120
Oy      121 LVFGLTANSDTHLLQGSLTLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Db      121 LVFGLTANSDTHLLQGSLTLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Oy      181 TWTCVTVLQNKQKVEFKIDIVVLAFOKASSIYKKKEGVESFPPLAFTVEKLTGSGELMW 240
Db      181 TWTCVTVLQNKQKVEFKIDIVVLAFOKASSIYKKKEGVESFPPLAFTVEKLTGSGELMW 240
Oy      241 QAERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPLHLTLPOALPOYAGSGNLTTLA 300
Db      241 QAERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPLHLTLPOALPOYAGSGNLTTLA 300
Oy      301 LEAKTGKHOEVLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWV 360
Db      301 LEAKTGKHOEVLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWV 360
Oy      361 LNPEAGMWQCLLSDSGVLLSNTIKVLPWTSTPVP 394
Db      361 LNPEAGMWQCLLSDSGVLLSNTIKVLPWTSTPVP 394

```

RESULT 58

AAR78673 standard; protein; 398 AA.

AAR78673;

12-APR-1996 (first entry)

CD4 domains D1-D4.

Chimeric receptor; CD4; T-cell receptor; HIV; cytolysis; human immunodeficiency virus; adoptive immunotherapy.

Homo sapiens.

MO9521528-A1.

17-AUG-1995.

12-JAN-1995; 95MO-US000454.

14-FEB-1994; 94US-00195395.

02-AUG-1994; 94US-00284391.

(GEHO) GEN HOSPITAL CORP.

Seed B, Banapour B, Romeo C, Kolanus W;

WPI, 1995-292893/38.

N-PSDB; AAQ96103.

Target cytolysis of HIV-infected cells - by chimeric CD4 receptor-bearing cells.

PS Example 10; Fig 23; 118pp; English.

XX Extracellular domains D1-D4 (AAR78673) or D1-D2 (AAR78674) of human CD4
CC are used in the construction of chimeric receptors utilised in the
CC targeted cytolysis of cells expressing HIV envelope proteins on their
CC surface. The chimeric receptors comprise the extracellular domain (pref.
CC amino acids 1-394 or 1-200) of CD4 linked to an intracellular portion,
CC e.g. of T-cell receptor protein zeta

XX Sequence 398 AA;

Query Match 59.3%; Score 2026; DB 2; Length 398;
Best Local Similarity 99.7%; Pred. No. 7,6e-103;
Matches 393; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```

QY 1 MNRGVFRRHLVLVQLALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHKNSNOIK 60
   |||
DB 1 MNRGVFRRHLVLVQLALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHKNSNOIK 60
QY 61 ILGNQGSFLTKGPKSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
   |||
DB 61 ILGNQGSFLTKGPKSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDDTHLLQGQSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLSSVQLBLQDSG 180
   |||
DB 121 LVFGLTANSDDTHLLQGQSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLSSVQLBLQDSG 180
QY 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIVYKKEGQVEFSFPLAFTVEKLTGSGELMW 240
   |||
DB 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIVYKKEGQVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPOALPOVAGSGLTLTA 300
   |||
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPOALPOVAGSGLTLTA 300
QY 301 LEAKTGKLEHVEVNLVVMRATQLOKNIATCEVWGPTSPKMLSLKLENKEAKVSKREKPVVW 360
   |||
DB 301 LEAKTGKLEHVEVNLVVMRATQLOKNIATCEVWGPTSPKMLSLKLENKEAKVSKREKPVVW 360
QY 361 LNPBAGMMOCLLSDSGOVLLESNIKVLPTWSTPV 394
   |||
DB 361 LNPBAGMMOCLLSDSGOVLLESNIKVLPTWSTPV 394

```

RESULT 59

AAB19509 standard; protein; 416 AA.

XX AAB19509;

XX 09-JAN-2001 (first entry)

XX CD4-IgM fusion protein CH4Mmu.

XX CD4; IgM; human; CD4Mmu; fusion protein; immunoglobulin; HIV; SIV; gp120;
XX therapy; diagnosis.

XX Homo sapiens.

XX Key Location/Qualifiers

XX FT Protein 1..395

XX FT Protein /note="CD4 extracellular region"

XX FT Protein /note="IgM heavy chain partial sequence"

XX US6117656-A.

XX 12-SEP-2000.

XX 07-JUN-1995; 95US-00479353.

XX 22-JAN-1988; 88US-00147351.

XX 23-JAN-1989; 89US-00299596.

PR 09-JUN-1992; 92US-00896781.

PR 12-APR-1993; 93US-00057952.

PR 04-FEB-1994; 94US-00191708.

XX (GENO) GEN HOSPITAL CORP.

XX Seed B;

XX WPI; 2000-586558/55.

XX N-PSDB; AAA50662.

XX CD4-immunoglobulin fusion proteins, useful for targeting gp120 of HIV or
XX SIV.

XX Example 1; Col 41-50; 39pp; English.

XX The present sequence is that of fusion protein CD4Mmu comprising the
XX extracellular portion of CD4, which binds to HIV gp120, linked at its C-
XX terminus to the human IgM heavy chain. To obtain the fusion protein, DNA
XX encoding CD4 was linked to IgM DNA at the Met2 site upstream of the CH1
XX region (see AAA50662). Fusion protein CD4Mmu and a nucleic acid encoding
XX it are claimed. Also claimed are a vector comprising the nucleic acid,
XX and a method of producing the fusion protein in secreted form using a
XX transformed host cell. The fusion protein may further comprise a
XX therapeutic agent, radiolabel or NMR imaging agent. The fusion protein
XX can be administered to an animal (including humans) for treatment of HIV
XX and SIV infection, and can also be used in assays for HIV or SIV, imaging
XX mediated immunity

SQ Sequence 416 AA;

Query Match 59.3%; Score 2024; DB 3; Length 416;
Best Local Similarity 96.8%; Pred. No. 1e-102;
Matches 396; Conservative 2; Mismatches 9; Indels 2; Gaps 1;

```

QY 1 MNRGVFRRHLVLVQLALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHKNSNOIK 60
   |||
DB 1 MNRGVFRRHLVLVQLALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHKNSNOIK 60
QY 61 ILGNQGSFLTKGPKSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
   |||
DB 61 ILGNQGSFLTKGPKSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDDTHLLQGQSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLSSVQLBLQDSG 180
   |||
DB 121 LVFGLTANSDDTHLLQGQSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLSSVQLBLQDSG 180
QY 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIVYKKEGQVEFSFPLAFTVEKLTGSGELMW 240
   |||
DB 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIVYKKEGQVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPOALPOVAGSGLTLTA 300
   |||
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPOALPOVAGSGLTLTA 300
QY 301 LEAKTGKLEHVEVNLVVMRATQLOKNIATCEVWGPTSPKMLSLKLENKEAKVSKREKPVVW 360
   |||
DB 301 LEAKTGKLEHVEVNLVVMRATQLOKNIATCEVWGPTSPKMLSLKLENKEAKVSKREKPVVW 360
QY 361 LNPBAGMMOCLLSDSGOVLLESNIKVLPTWSTPV--EPKSCDKTHTCP 407
   |||
DB 361 LNPBAGMMOCLLSDSGOVLLESNIKVLPTWSTPVADDEGASAPFTLP 409

```

RESULT 60

AAV88329 standard; protein; 458 AA.

XX AAV88329;

XX 14-JUL-2000 (first entry)

DE T4 glycoprotein amino acid sequence.
 XX sT4; glycoprotein; human immunodeficiency virus; HIV; block binding;
 KW AIDS; treatment; inhibit; cell to cell spread; infection; fusion.
 OS Mammalia.
 XX US5126433-A.
 XX 30-JUN-1992.
 XX 23-OCT-1987; 87US-00114244.
 XX 21-AUG-1986; 86US-00898587.
 XX (UNCO) UNIV COLUMBIA NEW YORK.
 PA Maddon PJ, Chess L, Axel R, Weiss R, Littman DR, McDougal JS;
 XX WPI; 2000-348913/30.
 XX Soluble T4 glycoprotein useful for prevention and treatment of acquired
 PT immunodeficiency syndrome and for screening inhibitors of human
 PT immunodeficiency viral binding.
 XX Example; Fig 6; 64pp; English.
 XX This sequence represents the amino acid sequence of glycosylated sT4
 CC glycoprotein. Human immunodeficiency virus (HIV) uses sT4 as a target
 CC receptor on T cells. The invention relates to glycosylated sT4 which
 CC functions by blocking the binding of HIV to T4 target cells, and can be
 CC used for the prophylaxis and treatment of AIDS patients. Administration
 CC of sT4 effectively inhibits the cell to cell spreading of HIV infection
 CC and also the fusion of HIV-infected T4 cells and non-infected T4 cells.
 CC The administration of T4 alleviates several symptoms associated with
 CC AIDS, and prevents the occurrence of new pathological changes. The sT4
 CC glycoprotein is useful for the prophylaxis and treatment of patients with
 CC AIDS. It is also useful as a reagent to identify natural, synthetic or
 CC recombinant molecules which act as therapeutic agents or inhibitors of
 CC T4+ cell interactions and in diagnostic assays for detection T4 proteins
 CC or molecules
 XX Sequence 458 AA;
 SQ
 Query Match 59.3%; Score 2024; DB 3; Length 458;
 Best Local Similarity 99.2%; Pred. No. 1.1e-102;
 Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

DB 361 LNPEAGMOCILSDSGVLLSNIKVLPTWSTPVP 396
 |||||
 RESULT 61
 ID AAB81502 standard; protein; 458 AA.
 AC AAB81502;
 XX 18-JUN-2001 (first entry)
 DE Human CD4 protein.
 XX Human; CD4; CD4 fusion protein; oligomerisation;
 KW receptor-ligand interaction inhibition; surface plasmon resonance; SPR;
 KW T cell receptor binding; MHC binding; carcinoma; autoimmune disease;
 KW multiple sclerosis; human immunodeficiency virus; HIV; diabetes;
 KW rheumatoid arthritis; immune disorder.
 XX Homo sapiens.
 OS
 FH Key Location/Qualifiers
 FT Peptide 1..25
 FT Protein /label= signal_peptide
 FT /label= Human_CD4
 XX MO200122084-A2.
 XX 29-MAR-2001.
 XX 18-SEP-2000; 2000MO-GB003579.
 XX 21-SEP-1999; 99GB-00022352.
 XX (AVID-) AVIDEX LTD.
 PA Jakobsen BK;
 XX WPI; 2001-273470/28.
 DR N-PSDB; AAF82582.
 PT Sequential screening of candidate compounds library for those which
 PT inhibit binding of low affinity receptor-ligand interaction having fast
 PT binding kinetics, using interfacial optical assay.
 XX Disclosure; Fig 13; 91pp; English.
 XX The present sequence is human CD4. Human CD4 extracellular domains 1 and
 CC 2 were used in the construction of CD4 oligomerisation fusion proteins.
 CC The fusion proteins contain an oligomerisation domain that enables the
 CC proteins to bind to one another to form oligomers. The oligomers may be
 CC used in an invention relating to a method for screening for compounds
 CC with the ability to inhibit a low affinity receptor-ligand interaction.
 CC The method uses an interfacial optical assay, such as surface plasmon
 CC resonance (SPR). The method is useful for screening candidate compounds
 CC for the ability to inhibit interaction between MHC/peptide complex and T
 CC cell receptor, and MHC/peptide complex and CD8 or CD4 co-receptor. The
 CC compounds identified by the above methods which interfere with T cell
 CC receptor binding to a particular HLA type molecule are useful as immune
 CC inhibitors for treating carcinomas, autoimmune diseases such as multiple
 CC sclerosis, human immunodeficiency virus (HIV) infection, rheumatoid
 CC arthritis, Hashimoto's disease, insulin dependent diabetes, Good
 CC pasture's syndrome, uveitis, psoriasis and graft rejection
 XX Sequence 458 AA;
 SQ
 Query Match 59.3%; Score 2024; DB 4; Length 458;
 Best Local Similarity 99.2%; Pred. No. 1.1e-102;
 Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;


```
Db      |||
1  NMRGVPFRHLIVLQALLPAAATGKVVLGKGGDTVELTCTASQKKSIOFHWKNSNOIX 60
Qy      61  ILGNQGSFLTKGPKSLNDRADSRSLMDQGNFPLIIKLIKIEDSDTYICEVDQKEEYVL 120
Db      61  ILGNQGSFLTKGPKSLNDRADSRSLMDQGNFPLIIKLIKIEDSDTYICEVDQKEEYVL 120
Qy      121 LVFGLTANSDFTHLQGSQSLTLTLSPSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Db      121 LVFGLTANSDFTHLQGSQSLTLTLSPSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Qy      181 TWTCTVLQNKQKVEFKIDIVLAFQKASSIYVKKEGQVEFSPPLAFVTEKLTGSGELMW 240
Db      181 TWTCTVLQNKQKVEFKIDIVLAFQKASSIYVKKEGQVEFSPPLAFVTEKLTGSGELMW 240
Qy      241 QAEKRRSSKSWITFDLKNKEVSVKRVTDPKLQMKKPLHLHTLPQALPOVAGSNLTLLA 300
Db      241 QAEKRRSSKSWITFDLKNKEVSVKRVTDPKLQMKKPLHLHTLPQALPOVAGSNLTLLA 300
Qy      301 LEAKTGKGLHQBENLVVVRATOLQKNTLCEVWGPTSPKMLSLKLENKAKVSKREKPVV 360
Db      301 LEAKTGKGLHQBENLVVVRATOLQKNTLCEVWGPTSPKMLSLKLENKAKVSKREKPVV 360
Qy      361 INPEAGMWQCLLSDSGQVLLSESNIKVLPWTWSTPVP 396
Db      361 INPEAGMWQCLLSDSGQVLLSESNIKVLPWTWSTPVP 396

RESULT 62
ADD25609
ID      ADD25609 standard; protein; 458 AA.
XX
AC      ADD25609;
XX
DE      15-JAN-2004 (first entry)
XX
Binding domain-immunoglobulin fusion protein-associated protein #82.
XX
Binding domain; immunoglobulin; fusion protein; cytoskeletal;
XX  antiarthritis; immunosuppressive; antidiabetic; anticholester-
XX  neuroprotective; hinge region; immunoglobulin heavy chain;
XX  CH2 constant region; CH3 constant region; IgG1;
XX  antibody dependent cell-mediated cytotoxicity; ADCC; complement fixation;
XX  malignant condition; B-cell disorder; melanoma; carcinoma; sarcoma;
XX  rheumatoid arthritis; myasthenia gravis; Grave's disease;
XX  type I diabetes mellitus; multiple sclerosis; autoimmune disease.
XX
OS      Unidentified.
XX
PN      US2003118592-A1.
XX
PD      26-JUN-2003.
XX
PF      25-JUL-2002; 2002US-00207655.
XX
PR      17-JAN-2001; 2001US-0367358P.
XX  17-JAN-2002; 2002US-00053530.
XX  03-JUN-2002; 2002US-0385691P.
XX
PA      (GENE-) GENE-CRAFT INC.
XX
PI      Ledbetter JA, Hayden-Ledbetter MS, Thompson PA.
XX
DR      WPI; 2003-801317/75.
XX
PT      New binding domain-immunoglobulin fusion protein, useful for treating a
XX  subject having or suspected of having a malignant condition or a B-cell
XX  disorder, e.g. melanoma, Grave's disease or autoimmune disease.
XX
PS      Disclosure; SEQ ID NO 170; 157pp; English.
XX
CC      The invention relates to a binding domain-immunoglobulin fusion protein
XX  comprising a binding domain polypeptide that is fused to an
```

```
CC  immunoglobulin hinge region polypeptide, an immunoglobulin heavy chain
CC  CH2 constant region polypeptide that is fused to the hinge region
CC  polypeptide, and an immunoglobulin heavy chain CH3 constant region
CC  polypeptide that is fused to the CH2 constant region polypeptide. The
CC  hinge region polypeptide comprises a wild-type human IgG1 immunoglobulin
CC  hinge region polypeptide; a mutated human IgG1 immunoglobulin hinge
CC  region polypeptide, derived from (a) having 3 or more cysteine residues;
CC  where the mutated human IgG1 immunoglobulin hinge region polypeptide
CC  contains 2 cysteine residues, where the first cysteine is not mutated; a
CC  mutated human IgG1 immunoglobulin hinge region polypeptide, derived from
CC  (a) having 3 or more cysteine residues, where the mutated human IgG1
CC  immunoglobulin hinge region polypeptide contains no more than one
CC  cysteine residue; and a mutated human IgG1 immunoglobulin hinge region
CC  polypeptide, derived from (a) having 3 or more cysteine residues; where
CC  the mutated human IgG1 immunoglobulin hinge region polypeptide contains
CC  no cysteine residues. The binding domain-immunoglobulin fusion protein is
CC  capable of at least one immunological activity comprising antibody
CC  dependent cell-mediated cytotoxicity (ADCC) and complement fixation. The
CC  binding domain polypeptide is capable of specifically binding to an
CC  antigen. Also included are an isolated polynucleotide encoding the
CC  binding domain-immunoglobulin fusion protein, a recombinant expression
CC  construct comprising the polynucleotide (operably linked to a promoter),
CC  a host cell transformed or transfected with a recombinant expression
CC  construct, producing the binding domain-immunoglobulin fusion protein, a
CC  pharmaceutical composition comprising the binding domain-immunoglobulin
CC  fusion protein or polynucleotide and a carrier, and treating a subject
CC  having or suspected of having a malignant condition or a B-cell disorder.
CC  The binding domain-immunoglobulin fusion protein is useful for treating a
CC  subject having or suspected of having a malignant condition or a B-cell
CC  disorder, e.g. melanoma, carcinoma or sarcoma, rheumatoid arthritis,
CC  myasthenia gravis, Grave's disease, type I diabetes mellitus, multiple
CC  sclerosis or autoimmune disease. The present sequence is a binding domain
CC  -immunoglobulin fusion protein-associated protein sequence. Note: The
CC  sequence data for this patent formed part of the printed specification
CC  and is also available in electronic format directly from USPTO at
CC  seqdata.uspto.gov/sequence.html?DOCID=20030118592. The authors have not
CC  identified the sequence in the printed specification by their SEQ ID
CC  number therefore none of the sequences can be explicitly identified.
XX
SQ      Sequence 458 AA;
```

Query Match 59.3%; Score 2024; DB 7; Length 458;

Best Local Similarity 99.2%; Pred. No. 1,1e-102;

Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

```
Qy      1  NMRGVPFRHLIVLQALLPAAATGKVVLGKGGDTVELTCTASQKKSIOFHWKNSNOIX 60
Db      1  NMRGVPFRHLIVLQALLPAAATGKVVLGKGGDTVELTCTASQKKSIOFHWKNSNOIX 60
Qy      61  ILGNQGSFLTKGPKSLNDRADSRSLMDQGNFPLIIKLIKIEDSDTYICEVDQKEEYVL 120
Db      61  ILGNQGSFLTKGPKSLNDRADSRSLMDQGNFPLIIKLIKIEDSDTYICEVDQKEEYVL 120
Qy      121 LVFGLTANSDFTHLQGSQSLTLTLSPSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Db      121 LVFGLTANSDFTHLQGSQSLTLTLSPSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Qy      181 TWTCTVLQNKQKVEFKIDIVLAFQKASSIYVKKEGQVEFSPPLAFVTEKLTGSGELMW 240
Db      181 TWTCTVLQNKQKVEFKIDIVLAFQKASSIYVKKEGQVEFSPPLAFVTEKLTGSGELMW 240
Qy      241 QAEKRRSSKSWITFDLKNKEVSVKRVTDPKLQMKKPLHLHTLPQALPOVAGSNLTLLA 300
Db      241 QAEKRRSSKSWITFDLKNKEVSVKRVTDPKLQMKKPLHLHTLPQALPOVAGSNLTLLA 300
Qy      301 LEAKTGKGLHQBENLVVVRATOLQKNTLCEVWGPTSPKMLSLKLENKAKVSKREKPVV 360
Db      301 LEAKTGKGLHQBENLVVVRATOLQKNTLCEVWGPTSPKMLSLKLENKAKVSKREKPVV 360
Qy      361 INPEAGMWQCLLSDSGQVLLSESNIKVLPWTWSTPVP 396
Db      361 INPEAGMWQCLLSDSGQVLLSESNIKVLPWTWSTPVP 396
```

RESULT 63
ADE57489
ID ADE57489 standard; protein; 458 AA.
XX
AC ADE57489;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human Protein P01730, SEQ ID NO 3351.
XX
KW Human; pain; neuronal tissue; gene therapy;
KW spinal segmental nerve injury; chronic constriction injury; CCI;
KW spared nerve injury; SN1; Chung.
XX
OS Homo sapiens.
XX
PN MO2003016475-A2.
XX
PD 27-FEB-2003.
XX
PF 14-AUG-2002; 2002MO-US025765.
XX
PR 14-AUG-2001; 2001US-0312147P.
PR 01-NOV-2001; 2001US-0346382P.
PR 26-NOV-2001; 2001US-0333347P.
XX
PA (GENO) GEN HOSPITAL CORP.
PA (FARB) BAYER AG.
XX
P1 Woolf C, D'Urso D, Befort K, Costigan M;
XX
DR MPI; 2003-268312/26.
DR GENBANK; P01730.
XX
PT New composition comprising two or more isolated polypeptides, useful for
PT preparing a medicament for treating pain in an animal.
XX
PS Claim 1; Page: 1017pp; English.
XX
XX The invention discloses a composition comprising two or more isolated rat
CC or human polynucleotides or a polynucleotide which represents a fragment,
CC derivative or allelic variation of the nucleic acid sequence. Also
CC claimed are a vector comprising the novel polynucleotide, a host cell
CC comprising the vector, a method for identifying a nucleotide sequence
CC which is differentially regulated in an animal subjected to pain and a
CC kit to perform the method, an array, a method for identifying an agent
CC that increases or decreases the expression of the polynucleotide sequence
CC that is differentially expressed in neuronal tissue of a first animal
CC subjected to pain, a method for identifying a compound which regulates
CC the expression of a polynucleotide sequence which is differentially
CC expressed in an animal subjected to pain, a method for identifying a
CC compound that regulates the activity of one or more of the
CC polynucleotides, a method for producing a pharmaceutical composition, a
CC method for identifying a compound or small molecule that regulates the
CC activity in an animal of one or more of the polypeptides given in the
CC specification, a method for identifying a compound useful in treating
CC pain and a pharmaceutical composition comprising the one or more
CC polypeptides or their antibodies. The polynucleotide or the compound that
CC modulates its activity is useful for preparing a medicament for treating
CC pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC injury (CCI) and spared nerve injury (SN1)) in an animal (e.g. gene
CC therapy). The sequence presented is a human protein (shown in Table 2 of
CC the specification) which is differentially expressed during pain. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic form directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 458 AA;

Query Match 59.3%; Score 2024; DB 7; Length 458;
Best Local Similarity 99.2%; Pred. No. 1.1e-102;
Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 MNRGVPRHLLLVLTALLPAAIQGNKRVLGKKGDIYELTCTASQKKSIOFHMKNNSNQIK 60
DB 1 MNRGVPRHLLLVLTALLPAAIQGNKRVLGKKGDIYELTCTASQKKSIOFHMKNNSNQIK 60
QY 61 ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEBDDTYICEVEDQKEVQL 120
DB 61 ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEBDDTYICEVEDQKEVQL 120
QY 121 LVFGLTANSDPHLLIQGSLTTLTLESPGSSPSVQCRSPRGNIQGKTLVSQLELDSG 180
DB 121 LVFGLTANSDPHLLIQGSLTTLTLESPGSSPSVQCRSPRGNIQGKTLVSQLELDSG 180
QY 181 TWICTVLQNGKVEFKIDIVLAFQKASSIVYKKGQVFPSPFLATVTEKLTGSGELMW 240
DB 181 TWICTVLQNGKVEFKIDIVLAFQKASSIVYKKGQVFPSPFLATVTEKLTGSGELMW 240
QY 241 QAERASSKSWITFDLKNKESVSRVYQDPKLGKTLPHLTLPOLPQYAGGNLTLLA 300
DB 241 QAERASSKSWITFDLKNKESVSRVYQDPKLGKTLPHLTLPOLPQYAGGNLTLLA 300
QY 301 LEAKTGKLEHENVLVVWRATQLOKNTLCEVWGPTSPKLMSTLKLENKAKVSKKEPVMV 360
DB 301 LEAKTGKLEHENVLVVWRATQLOKNTLCEVWGPTSPKLMSTLKLENKAKVSKKEPVMV 360
QY 361 LNPEAGMWQCLLSDSGVLLLESNIKVLPTWSTPYEP 396
DB 361 LNPEAGMWQCLLSDSGVLLLESNIKVLPTWSTPYEP 396

RESULT 64
ADA44807
ID ADA44807 standard; protein; 473 AA.
XX
AC ADA44807;
XX
DT 04-DEC-2003 (first entry)
XX
DE CD4/TCR CD3epsilon chain chimeric protein CD4epsilon1on15, SEQ ID NO:2.
XX
KW HIV-1 infection; human immunodeficiency virus-1; CD4+ cell; chimeric CD4;
KW endoplasmic reticulum; ER retention; envelope protein gp160;
KW T cell receptor CD3epsilon chain; C-terminal domain; CD4epsilon1on15;
KW gene therapy; human; receptor.
OS Chimeric.
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Protein 1..458
FT Region 459..473
FT /note= "Part of the C-terminal domain of the T cell
FT receptor CD3epsilon chain"
XX
PN MO2003076468-A1.
XX
PD 18-SEP-2003.
XX
PF 14-MAR-2003; 2003MO-BE000120.
XX
PR 14-MAR-2002; 2002ES-00000616.
XX
PA (CNSJ) CONSEJO SUPERIOR INVESTIGACIONES CIENTIF.
XX Alarcon Sanchez BJ, San Jose Martinez ME, Zaldivar Nocardio I;
XX Gomez Buendia M;
XX
DR MPI; 2003-779059/73.
DR N-PSDB; ADA44806.
XX
PT Composition for treating or preventing human immune deficiency virus,
PT comprises CD4 chimeric protein having a protective effect in trans, or

PT related nucleic acid.
XX
PS Claim 5; Page 33-35; 43pp; Spanish.
XX
CC The invention relates to a composition for the treatment or prevention of
CC human immunodeficiency virus-1 (HIV-1) infection. The composition
CC comprises CD4+ cells that have been transduced with a vector that encodes
CC a chimeric CD4 molecule which is capable of being retained in the
CC endoplasmic reticulum (ER). The invention also encompasses the use of a
CC soluble protein factor produced by CD4+ cells that have been transduced
CC with a vector encoding a chimeric CD4 protein; and the use of an
CC expression system encoding a chimeric CD4 protein. The ER-localized
CC chimeric CD4 molecule binds to the HIV-1 envelope protein gp160,
CC resulting in HIV-1 retention in the ER and thereby preventing viral
CC replication. In a specific embodiment, the chimeric CD4 molecule
CC comprises CD4 fused to 15 amino acids of the C-terminal domain of the T
CC cell receptor CD3epsilon chain; this chimeric CD4 molecule is designated
CC CD4epsilon15 (ADA44807). A known chimeric CD4 of similar structure but
CC containing only 10 amino acids from CD3epsilon can also be used.
CC Compositions of the invention have an in trans effect on the replication
CC of HIV-1, and may be used to treat and prevent HIV-1 infection. The
CC present sequence represents the chimeric CD4 molecule CD4epsilon15, which
CC is specifically claimed for use in compositions of the invention.
XX
SQ Sequence 473 AA;

Query Match 59.3%; Score 2024; DB 7; Length 473;
Best Local Similarity 99.2%; Pred. No. 1.2e-102;
Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 NMRGVPFRLHLVQLALPPATQGNKVVLLGKKGDVVELTCTASQKSIQFHMKNNSNOIK 60
DB 1 NMRGVPFRLHLVQLALPPATQGNKVVLLGKKGDVVELTCTASQKSIQFHMKNNSNOIK 60
QY 61 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYQL 120
QY 61 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGILTANSDTHLLOQGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGILTANSDTHLLOQGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 121 LVFGILTANSDTHLLOQGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGILTANSDTHLLOQGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCTVLONOKKVEFKIDIVVLAFOKASSIYKKEGEVEFSPLAFTVEKLTSGGELMW 240
DB 181 TWTCTVLONOKKVEFKIDIVVLAFOKASSIYKKEGEVEFSPLAFTVEKLTSGGELMW 240
QY 241 QAEARASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKQLPLHLTLPOALPOYAGSGLTLA 300
DB 241 QAEARASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKQLPLHLTLPOALPOYAGSGLTLA 300
QY 301 LEAKTGKLGHOEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVW 360
DB 301 LEAKTGKLGHOEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVW 360
QY 361 LNPBAGMWOCLLSDSGOVLLESNIKVLPTWSTPVP 396
DB 361 LNPBAGMWOCLLSDSGOVLLESNIKVLPTWSTPVP 396

RESULT 65
AAR20152
ID AAR20152 standard; protein; 519 AA.
XX
XX AAR20152;
AC
XX
XX
DT 25-MAR-2003 (revisee)
DT 31-MAR-1992 (first entry)
XX
XX Human CD4 sequence encoded by PATY. 6.
DE
XX
XX Human immunodeficiency virus; HIV; gp 120; AIDS; ARC; glycoprotein;
KW acquired immune deficiency syndrome; AIDS related complex;
T helper lymphocytes.

XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Peptide 1..25
FT /label= signal_sequence
XX
XX MO9118618-A.
XX
XX 12-DEC-1991.
XX
XX 25-MAY-1990; 90US-00529186.
XX
XX 25-MAY-1990; 90US-00529186.
XX
XX (BIOJ) BIOGEN INC.
XX
XX Fisher RA, Hession C, Burklely LC;
XX
XX WPI: 1992-007200/01.
XX
XX N-PSDB; AAQ20327.
XX
XX New immuno-therapeutic human CD4 variants and derivs. - elicit AB
XX production to HIV gp.120, useful in treating, preventing and diagnosing
XX AIDS and HIV infections.
XX
XX Disclosure: Fig 28; 179pp; English.
XX
XX The sequence was deduced from the DNA sequence of subclone PATY.6, contg.
XX DNA coding for the full-length human CD4. The clone was constructed from
XX plasmids PBG178A and PBG378 (both in US8802940). The DNA can be used to
XX express recombinant CD4 and analogues for use in diagnosis and treatment
XX of diseases caused by infective agents whose primary targets are T4+
XX lymphocytes. See also AAR20148-R20155 and AAR21078. (Updated on 25-MAR-
XX 2003 to correct PA field.)
XX
SQ Sequence 519 AA;

Query Match 59.3%; Score 2024; DB 2; Length 519;
Best Local Similarity 99.2%; Pred. No. 1.3e-102;
Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 NMRGVPFRLHLVQLALPPATQGNKVVLLGKKGDVVELTCTASQKSIQFHMKNNSNOIK 60
DB 62 NMRGVPFRLHLVQLALPPATQGNKVVLLGKKGDVVELTCTASQKSIQFHMKNNSNOIK 121
QY 61 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYQL 120
DB 122 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYQL 181
QY 121 LVFGILTANSDTHLLOQGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGILTANSDTHLLOQGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 241
QY 181 TWTCTVLONOKKVEFKIDIVVLAFOKASSIYKKEGEVEFSPLAFTVEKLTSGGELMW 240
DB 182 LVFGILTANSDTHLLOQGSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 241
QY 242 TWTCTVLONOKKVEFKIDIVVLAFOKASSIYKKEGEVEFSPLAFTVEKLTSGGELMW 301
DB 242 TWTCTVLONOKKVEFKIDIVVLAFOKASSIYKKEGEVEFSPLAFTVEKLTSGGELMW 301
QY 241 QAEARASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKQLPLHLTLPOALPOYAGSGLTLA 300
DB 302 QAEARASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKQLPLHLTLPOALPOYAGSGLTLA 361
QY 301 LEAKTGKLGHOEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVW 360
DB 362 LEAKTGKLGHOEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVW 421
QY 361 LNPBAGMWOCLLSDSGOVLLESNIKVLPTWSTPVP 396
DB 422 LNPBAGMWOCLLSDSGOVLLESNIKVLPTWSTPVP 457

RESULT 66
AAR13491

ID	AA013491	standard; protein; 458 AA.
AC	AA013491;	
XX		
XX		
DT	25-MAR-2003	(revised)
DT	30-OCT-1991	(first entry)
XX		
DE	Human CD4 encoded by pUD.BCD4.Y187.Snab1 and p170.2.	
KW	C4bp; gp120; HIV; T lymphocyte; fusion protein.	
KW		
XX		
OS	Homo sapiens.	
XX		
FH	Key	Location/Qualifiers
FT	Peptide	1..25
FT		/label= signal_peptide
FT		26..132
FT	Domain	/label= Ig-related
FT		/note= "extracellular"
FT		41..109
FT	Disulfide-bond	133..202
FT	Domain	/label= Ig-related
FT		/note= "extracellular"
FT		155..184
FT	Disulfide-bond	203..318
FT	Domain	/label= Ig-related
FT		/note= "extracellular"
FT		319..395
FT	Domain	/label= Ig-related
FT		/note= "extracellular"
FT		328..370
FT	Disulfide-bond	396..416
FT	Region	/label= transmembrane
FT		417..456
FT	Domain	/label= cytoplasmic
XX		
PN	W09111461-A.	
XX		
PD	08-AUG-1991.	
XX		
PF	26-JAN-1990;	90US-00470888.
XX		
PR	26-JAN-1990;	90US-00470888.
XX		
PA	(BIOJ) BIOGEN INC.	
XX		
PI	Pasek MP, Winkler G, Liu TR;	
XX		
DR	WPI; 1991-252613/34.	
XX		
DR	N-PSDB; AA013243.	
XX		
PT	New C4 binding protein fusion proteins and DNA encoding them - comprise	
PT	assemblies of C4bp monomers linked to functional moiety, e.g. AZT, useful	
PT	as delivery vehicles in diagnosis and therapy.	
XX		
PS	Example 3; Fig 3; 105pp; English.	
XX		
CC	This is the preferred CD4 sequence for use in the construction of fusion	
CC	proteins with C4-binding protein. Truncated, soluble versions of CD4 can	
CC	also be used. The C4bp-CD4 fusion protein may be useful to target AZT or	
CC	similar anti-retroviral agent to HIV-infected cells. See AA013242-51.	
CC	(Updated on 25-MAR-2003 to correct PA field.)	
XX		
50	Sequence 458 AA;	

[illegible]

QY	61	ILGNQGSFLTGGPSKLTNLRADSRSLMPOGKLPILIIKLIKIEDSPYICEVEPDQKEVOL	120
QY	61	ILGNQGSFLTGGPSKLTNLRADSRSLMPOGKLPILIIKLIKIEDSPYICEVEPDQKEVOL	120
Db	61	ILGNQGSFLTGGPSKLTNLRADSRSLMPOGKLPILIIKLIKIEDSPYICEVEPDQKEVOL	120
QY	121	LVFGITLANSDFHLLOGQSILTLTLESPPGSSPSVQCRSPRGKNIQGGKTLISVSLLEIDSG	180
Db	121	LVFGITLANSDFHLLOGQSILTLTLESPPGSSPSVQCRSPRGKNIQGGKTLISVSLLEIDSG	180
QY	181	TWTCVTLONOKKVEKIDIVLAFQKASSIVYKKEGEQVEFSFPFLAFYTBKLTGSGELMW	240
Db	181	TWTCVTLONOKKVEKIDIVLAFQKASSIVYKKEGEQVEFSFPFLAFYTBKLTGSGELMW	240
QY	241	QAERASSSKSWITTFDLKKNKEVSVKKVTODPKLQMGKULPLHLTLPOLPOLYAGSGNLTLLA	300
Db	241	QAERASSSKSWITTFDLKKNKEVSVKKVTODPKLQMGKULPLHLTLPOLPOLYAGSGNLTLLA	300
QY	301	LEAKTGKILHOEYNLVVMPATOLQKNLTCEWGPSTPKMLSLKLENKEAKVSRKREPVWY	360
Db	301	LEAKTGKILHOEYNLVVMPATOLQKNLTCEWGPSTPKMLSLKLENKEAKVSRKREPVWY	360
QY	361	LNPEAGMMQCLLSDSGOVLTLESNIVLPTWSTPVEP	396
Db	361	LNPEAGMMQCLLSDSGOVLTLESNIVLPTWSTPVEP	396
RESULT 67			
AAP93506			
ID	AAP93506	standard; protein; 394 AA.	
XX	AAP93506;		
AC			
XX			
DT	25-MAR-2003	(revised)	
DT	02-JUN-1990	(first entry)	
XX			
DE	Derived sequence of soluble T4 lymphocyte surface protein (sT4).		
XX			
KM	Soluble T4 lymphocyte surface protein; sT4; AIDS therapy; AIDS diagnosis.		
XX			
OS	Homo sapiens.		
XX			
FH	Key	Location/Qualifiers	
FT	Protein	26..394	
FT	Misc-difference	26..26	
FT		/notes="When sequence was determined by amino acid sequencing, this residue was Lys."	
FT	Region	27..45	
FT		/notes="These residues are identical to those determined by amino acid sequencing"	
FT			
XX			
PN	EPJ31377-A.		
XX			
PD	26-APR-1989.		
XX			
PF	21-OCT-1988;	88EP-0030907.	
XX			
PR	23-OCT-1987;	87US-00112800.	
XX			
PA	(SMIK) SMITHKLINE BECKMAN CORP.		
XX	(SMIK) SMITHKLINE BECKMAN CORP.		
PI	Deen KC, Follenawass GM, Inacker RH, Sweet RW;		
XX			
DR	WPI.1989-124209/17.		
XX	N-PSDB; AAN90763.		
PT	Purifying soluble recombinant T4 lymphocyte surface protein - from cell culture by adsorption on cation exchanger, elution and treatment with anion exchanger.		
XX			
PS	Disclosure: Fig 1; 13pp; English.		
CC	The coding sequenc is derived from the published sequence of sT4. sT4 is useful in the prevention and treatment of AIDS by inhibiting spread of		

The coding sequence is derived from the published sequence of ST4. ST4 is useful in the prevention and treatment of AIDS by inhibiting spread of

CC the virus. It can also be used as an inhibitor of T4+ cell function, as a
 CC reagent for identifying inhibitors of T4+ cell interaction and to produce
 CC diagnostic monoclonal antibodies. (Updated on 25-MAR-2003 to correct PA
 CC field.) (Updated on 25-MAR-2003 to correct PI field.)

XX Sequence 394 AA;

Query Match 59.1%; Score 2018; DB 1; Length 394;
 Best Local Similarity 99.5%; Pred. No. 2e-102; Indels 0; Gaps 0;
 Matches 392; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 NMRGVFPHLLVLQALLPAATQGNKVVLGKGGDTVELTCTASQKKSIOFHWKNSNOIK 60
 DB 1 NMRGVFPHLLVLQALLPAATQGNKVVLGKGGDTVELTCTASQKKSIOFHWKNSNOIK 60
 QY 61 ILGNOSSEFLTKGSKLNDRAADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEYOL 120
 DB 61 ILGNOSSEFLTKGSKLNDRAADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEYOL 120
 QY 121 LVFGLTANSDFHLQGSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSDFHLQGSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWTCTVLQNOKKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPPLAFTVEKLTGSGELMW 240
 DB 181 TWTCTVLQNOKKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPPLAFTVEKLTGSGELMW 240
 QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
 DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
 QY 301 LEAKTGKLEHDEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYAV 360
 DB 301 LEAKTGKLEHDEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYAV 360
 QY 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPV 394
 DB 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPV 394

RESULT 68
 AAP91922
 ID AAP91922 standard; protein; 402 AA.
 XX
 AC AAP91922;
 XX
 DT 25-MAR-2003 (revised)
 DT 31-OCT-2002 (revised)
 DT 14-MAY-1990 (first entry)
 XX
 DE Sequence of a secreted form of the CD4 adhesion (CD4T) polypeptide.
 XX
 KW CD4 variants; CD4T; gp120; plasmid pRCD4; HIV-1; HTLV-IIIB.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Misc-difference 25..26
 FT Misc-difference 366
 FT Misc-difference /note="signal processing site"
 FT Misc-difference /note="other forms of CD4T terminate here"
 FT Misc-difference 368 /note="other forms of CD4T terminate here"
 XX
 PN EPJ14317-A.
 XX
 PD 03-MAY-1989.
 XX
 PF 03-OCT-1988; 88EP-00309194.
 XX
 PR 02-OCT-1987; 87US-00104329.
 PR 28-SEP-1988; 88US-00250785.
 XX

PA (GERTH) GENENTECH INC.
 XX
 XX Capon DJ, Gregory TJ;
 XX
 DR WPI; 1989-131855/18.
 DR N-PSDB; AAN90777.
 XX

PT Compens. concg. adhesion variants - useful in therapy and diagnostics,
 PT e.g. CD4 variants which are therapeutically useful for treating human
 PT immuno-deficiency virus.

XX Disclosure; Fig 1a-1c; 36pp; English.

PS It may be capable of binding gp120. It may be fused with an
 CC immunoglobulin constant domain, human transferrin, apolipoprotein,
 CC albumin, ricin A chain or diphtheria toxin A. It may be used for
 CC antiviral of immunomodulatory therapy particularly in treatment of HIV
 CC infection. It may have variants by insertion, substitution of deletion in
 CC non-functional regions. (Updated on 31-OCT-2002 to add missing OS field.)
 CC (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to
 CC correct PI field.)

XX Sequence 402 AA;

Query Match 59.1%; Score 2017; DB 1; Length 402;
 Best Local Similarity 99.7%; Pred. No. 2.4e-102; Indels 0; Gaps 0;
 Matches 392; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 NMRGVFPHLLVLQALLPAATQGNKVVLGKGGDTVELTCTASQKKSIOFHWKNSNOIK 60
 DB 1 NMRGVFPHLLVLQALLPAATQGNKVVLGKGGDTVELTCTASQKKSIOFHWKNSNOIK 60
 QY 61 ILGNOSSEFLTKGSKLNDRAADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEYOL 120
 DB 61 ILGNOSSEFLTKGSKLNDRAADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEYOL 120
 QY 121 LVFGLTANSDFHLQGSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSDFHLQGSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWTCTVLQNOKKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPPLAFTVEKLTGSGELMW 240
 DB 181 TWTCTVLQNOKKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPPLAFTVEKLTGSGELMW 240
 QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
 DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
 QY 301 LEAKTGKLEHDEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYAV 360
 DB 301 LEAKTGKLEHDEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPYAV 360
 QY 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPV 393
 DB 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPV 393

RESULT 69
 AAP94757
 ID AAP94757 standard; protein; 402 AA.
 XX
 AC AAP94757;
 XX
 DT 25-MAR-2003 (revised)
 DT 03-OCT-2002 (revised)
 DT 28-JAN-1991 (first entry)
 XX
 DE Sequence of a secreted form of the CD4 adhesion.
 XX
 KW HIV; antiviral; therapy; diagnosis.
 XX
 OS Homo sapiens.
 XX

FH Key Location/Qualifiers
 FT Peptide 1..25
 FT /note= "signal"
 FT Protein 26..402
 XX MO8902922-A.
 XX
 XX 06-APR-1989.
 XX
 XX 03-OCT-1988; 88MO-US003414.
 XX
 XX 02-OCT-1987; 87US-00104329.
 XX 28-SEP-1988; 88US-00250785.
 XX
 XX (GETH) GENENTECH INC.
 XX
 XX Capon DJ, Gregory TU;
 XX
 XX WPI; 1989-114397/15.
 XX N-PsDB; AAN90734.
 XX
 XX New nucleic acid sequences encoding adhesion, esp. CD 4, variants -
 XX partic. with trans-membrane domain inactivated or fused to other peptide,
 XX useful esp. for treating HIV infections.
 XX
 XX Disclosure; Fig 1a-1c; 78pp; English.
 XX
 XX The patent claims a nucleic acid encoding an aa sequence variant of an
 XX adhesion, which is pref. a CD4 polypeptide variant modified such that its
 XX transmembrane domain has been inactivated, either deleted or replaced by
 XX a sequence of hydrophilic hydrophathy profile. The aa sequence variant of
 XX an adhesion may also be a fusion of CD4 with a 2nd polypeptide esp. one
 XX contry. a non-CD4 epitope; a signal sequence; a cpd. able to elicit a
 XX humoral immune response (viral polypeptide or allergen); or a human
 XX plasma protein of long plasma half-life. CD4 fusion proteins can have
 XX antiviral and immunomodulatory activity and are esp. useful for treating
 XX HIV infections regardless of genetic variation within the virus. They and
 XX antibodies raised against them can also be used diagnostically for
 XX assaying adhesions and their ligands. (Updated on 03-OCT-2002 to add
 XX missing OS field.) (Updated on 25-MAR-2003 to correct PR field.) (Updated
 XX on 25-MAR-2003 to correct PA field.)
 XX
 XX Sequence 402 AA;
 SQ
 Query Match 59.1%; Score 2017; DB 1; Length 402;
 Best Local Similarity 99.7%; Pred. No. 2.4e-102;
 Matches 392; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Oy 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGDVETLTCTASQKSIQFHMKNNSQIK 60
 Db 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGDVETLTCTASQKSIQFHMKNNSQIK 60
 Oy 61 ILNGSGFLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEVQL 120
 Db 61 ILNGSGFLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEVQL 120
 Oy 121 LVFGLTANSDTHLLQGOSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
 Db 121 LVFGLTANSDTHLLQGOSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
 Oy 181 TWTCVTLQONKKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLATVEKLTGSGELMW 240
 Db 181 TWTCVTLQONKKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLATVEKLTGSGELMW 240
 Oy 241 QAEARSSSKSWITTPLNKKEVSVKRVTDPKLQMKKPLPLHLLTLPQALPQVAGSNLTILA 300
 Db 241 QAEARSSSKSWITTPLNKKEVSVKRVTDPKLQMKKPLPLHLLTLPQALPQVAGSNLTILA 300
 Oy 301 LEAKTGKLAHOEVNLYVMRATOLQKLTCEVMGPTSPKLTLSKLENKAKYSKEKPYVW 360
 Db 301 LEAKTGKLAHOEVNLYVMRATOLQKLTCEVMGPTSPKLTLSKLENKAKYSKEKPYVW 360
 Oy 361 LNPEAGMWQCLLSDSGVLLBSNIVKLPWTWSTP 393

Db 361 LNPEAGMWQCLLSDSGVLLBSNIVKLPWTWSTP 393
 |||||
 RESULT 70
 AAG79087
 ID AAG79087 standard; protein; 458 AA.
 AC AAG79087;
 XX
 XX 10-DEC-2001 (first entry)
 XX
 XX Amino acid sequence of human CD4 protein.
 XX
 XX Human; receptor; DC-SIGN; dendritic cell; T lymphocyte; HIV; gp120;
 XX C-type lectin; ICAM3; HIV entry; T cell; macrophage; HIV infection; CD4.
 XX Homo sapiens.
 XX
 XX MO200164752-A2.
 XX
 XX 07-SEP-2001.
 XX
 XX 28-FEB-2001; 2001MO-US006322.
 XX
 XX 02-MAR-2000; 2000US-00517605.
 XX
 XX (UYNY) UNIV NEW YORK STATE.
 XX (UYNI-) UNIV NIMMGEN.
 XX
 XX Littman DR, Kwon D, Van Kooyk Y, Geijtenbeek T;
 XX WPI; 2001-602565/68.
 XX
 XX An antibody for the treatment or prevention of HIV-infection comprises a
 XX gp120 portion which binds to DC-SIGN or is exposed upon gp120 binding of
 XX DC-SIGN due to concomitant conformational change.
 XX
 XX Disclosure; Page 115-116; 131pp; English.
 XX
 XX The specification describes an antibody which is specific for an
 XX antigenic fragment of gp120. This antigenic fragment binds to DC-SIGN or
 XX is exposed upon gp120 binding of DC-SIGN due to concomitant
 XX conformational change. DC-SIGN is a receptor that is specifically
 XX expressed on dendritic cells and facilitates infection of T lymphocytes
 XX with HIV. DC-SIGN is identical to a HIV-1 gp120-binding C-type lectin. DC
 XX -SIGN binds ICAM-3 (which is expressed constitutively on T lymphocytes)
 XX with high affinity. The antibody of the invention inhibits the trans
 XX enhancement of HIV entry into a T cell or macrophage facilitated by
 XX dendritic cells. The antibody is useful to treat or prevent HIV
 XX infection. The present sequence represents a human CD4 protein
 XX
 XX Sequence 458 AA;
 SQ
 Query Match 59.1%; Score 2016; DB 4; Length 458;
 Best Local Similarity 99.0%; Pred. No. 3.1e-102;
 Matches 392; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
 Oy 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGDVETLTCTASQKSIQFHMKNNSQIK 60
 Db 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKGDVETLTCTASQKSIQFHMKNNSQIK 60
 Oy 61 ILNGSGFLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEVQL 120
 Db 61 ILNGSGFLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEVQL 120
 Oy 121 LVFGLTANSDTHLLQGOSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
 Db 121 LVFGLTANSDTHLLQGOSLTLLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSG 180
 Oy 181 TWTCVTLQONKKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLATVEKLTGSGELMW 240
 Db 181 TWTCVTLQONKKVEFKIDIVLAFQKASSIVYKKEGVEFSFPLATVEKLTGSGELMW 240

```
QY 241 QAEASSSKSWITFDLKNKEVSVKRYTODPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QAEASSSKSWITFDLKNKEVSVKRYTODPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVWV 360
DB 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVWV 360
QY 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPEP 396
DB 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPEP 396

RESULT 71
AA58328
ID AAY88328 standard; protein; 394 AA.
AC AAY88328;
DT 14-JUL-2000 (first entry)
XX
DE T4 glycoprotein amino acid sequence.
KM sT4; glycoprotein; human immunodeficiency virus; HIV; block binding;
XX AIDS; treatment; inhibit; cell to cell spread; infection; fusion.
OS Mammalia.
XX
XX US5126433-A.
XX
XX 30-JUN-1992.
XX
XX 23-OCT-1987; 87US-00114244.
XX
XX 21-AUG-1986; 86US-00898587.
XX
XX (UYCO ) UNIV COLUMBIA NEW YORK.
XX
XX Madden PJ, Chess L, Axel R, Weiss R, Littman DR, McDougal JS;
XX
XX WPI; 2000-348913/30.
XX
XX N-PSDB; AAA10906.
XX
XX Soluble T4 glycoprotein useful for prevention and treatment of acquired
XX immunodeficiency syndrome and for screening inhibitors of human
XX immunodeficiency viral binding.
XX
XX Disclosure; Col 11-16; 64pp; English.
XX
XX This sequence represents the full length amino acid sequence of
XX glycosylated sT4 glycoprotein. Human immunodeficiency virus (HIV) uses
XX sT4 as a target receptor on T cells. The invention relates to
XX glycosylated sT4 which functions by blocking the binding of HIV to T4
XX target cells, and can be used for the prophylaxis and treatment of AIDS
XX patients. Administration of sT4 effectively inhibits the cell to cell
XX spreading of HIV infection and also the fusion of HIV-infected T4 cells
XX and non-infected T4 cells. The administration of T4 alleviates several
XX symptoms associated with AIDS, and prevents the occurrence of new
XX pathological changes. The sT4 glycoprotein is useful for the prophylaxis
XX and treatment of patients with AIDS. It is also useful as a reagent to
XX identify natural, synthetic or recombinant molecules which act as
XX CC therapeutic agents or inhibitors of T4+ cell interactions and in
XX CC diagnostic assays for detection T4 proteins or molecules
XX
XX Sequence 394 AA;
SQ

Query Match 59.0%; Score 2015; DB 3; Length 394;
Best Local Similarity 99.5%; Pred. No. 3e-102; Mismatches 2; Indels 0; Gaps 0;
Matches 392; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 NNRGVFRRLLLVQLALLPAATQGNKVVYLGKKGDVVELTCTASQKKSIOFHKNSNOIK 60
|||||
```

```
DB 1 NNRGVFRRLLLVQLALLPAATQGNKVVYLGKKGDVVELTCTASQKKSIOFHKNSNOIK 60
QY 61 IIGNQSFLTKGSPKLNDRADSRSLMPOGNPLIINKLKTEDSPTYICEVDQKEVQL 120
DB 61 IIGNQSFLTKGSPKLNDRADSRSLMPOGNPLIINKLKTEDSPTYICEVDQKEVQL 120
QY 121 LVFGLTANSDBTLLOGOSITLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDBTLLOGOSITLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCVTLONOKKVEEKIDIVLAFOKASSIVYKKEGOVEFSFPLAFVTEKLTSGGEIWM 240
DB 181 TWTCVTLONOKKVEEKIDIVLAFOKASSIVYKKEGOVEFSFPLAFVTEKLTSGGEIWM 240
QY 241 QAEASSSKSWITFDLKNKEVSVKRYTODPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QAEASSSKSWITFDLKNKEVSVKRYTODPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVWV 360
DB 301 LEAKTGKLGHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVWV 360
QY 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPEP 394
DB 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPEP 394

RESULT 72
AA59825
ID AAY39825 standard; protein; 394 AA.
XX
XX AAY39825;
XX
XX 03-DEC-1999 (first entry)
XX
XX Soluble human T4 protein.
XX
XX Soluble T4 protein; sT4; human; HIV; binding inhibitor; T4+ cell; AIDS;
XX KM vaccine; immunisation; therapy.
XX
XX Homo sapiens.
XX
XX US5958678-A.
XX
XX 28-SEP-1999.
XX
XX 12-DEC-1994; 94US-00354452.
XX
XX 21-AUG-1986; 86US-00898587.
XX
XX 11-JUN-1991; 91US-00713564.
XX
XX 06-JUL-1992; 92US-00909021.
XX
XX (UYCO ) UNIV COLUMBIA NEW YORK.
XX
XX McDougal JS, Weiss R, Axel R, Littman DR, Chess L;
XX
XX WPI; 1999-561025/47.
XX
XX N-PSDB; AA220694.
XX
XX Human T4 protein inhibits HIV binding to T4 cells, useful for treating
XX AIDS.
XX
XX Disclosure; Col 13-16; 58pp; English.
XX
XX This sequence represents the soluble human T4 protein of the invention.
XX The soluble human T4 protein blocks the binding of HIV to T4+ cells and
XX is therefore useful for the treatment of AIDS. Monoclonal antibodies
XX against the T4 protein may be used as vaccines for immunising subjects
XX
XX Sequence 394 AA;
SQ

Query Match 58.9%; Score 2012; DB 2; Length 394;
```

Best Local Similarity 99.2%; Pred. No. 4.3e-102;
Matches 391; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

```

QY 1 MNRGVPRHLLVLTQALLPAATQGNKVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60
DB 1 MNRGVPRHLLVLTQALLPAATQGNKVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60
QY 61 ILGNQSFLLTKGSPKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQSFLLTKGSPKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLLOQGSLLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDTHLLOQGSLLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCVTQONOKKVEFKIDIVVLAFOKASSIVYKKEGVQVFPPLATVEKLTGSGELMW 240
DB 181 TWTCVTQONOKKVEFKIDIVVLAFOKASSIVYKKEGVQVFPPLATVEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
QY 301 LEAKTGKLGHOENVLVVVRATQLOKNLTCEVWGPTSPKLMSTKLENKEAKYSKREKAVW 360
DB 301 LEAKTGKLGHOENVLVVVRATQLOKNLTCEVWGPTSPKLMSTKLENKEAKYSKREKAVW 360
QY 361 LNPEAGMWOCCLSDSGVLLSNIKVLPTWSTPV 394
DB 361 LNPEAGMWOCCLSDSGVLLSNIKVLPTWSTPV 394

```

RESULT 73

ADES5841

ID ADE55841 standard; protein; 458 AA.

XX ADE5841;

DT 29-JAN-2004 (first entry)

DE Human CD4 receptor.

XX Human; CD4 receptor; receptor; protein-protein interaction;

KM protein array; PD2 domain; drug target screening.

XX Homo sapiens.

FN US2003170723-A1.

PD 11-SEP-2003.

PF 06-MAR-2002; 2002US-00092138.

PR 06-MAR-2002; 2002US-00092138.

PA (SATO/) SATO T.

PI Sato T;

XX WPI; 2003-852032/79.

PT Preparing a protein array useful for screening drug targets comprising
PT depositing an array of a first protein on substrate, and applying a
PT second protein comprising an amino acid sequence that binds to a domain
PT of the first protein.

PS Disclosure; SEQ ID NO 25; 60pp; English.

CC The invention relates to a method for preparing a protein array based on
CC protein-protein interaction, by depositing an array of a first protein
CC comprising a PDZ domain on a substrate, and applying a second protein
CC comprising an amino acid sequence that binds to the PDZ domain of the
CC first protein. The method is useful for preparing protein arrays based on

CC biochemical protein-protein interactions. Arrays produced by this method
CC are useful for screening drug targets. This sequence represents the human
CC CD4 receptor, used in the method of the invention.

SO Sequence 458 AA;

Query Match 58.8%; Score 206; DB 7; Length 458;
Best Local Similarity 98.5%; Pred. No. 1.1e-101;
Matches 390; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

```

QY 1 MNRGVPRHLLVLTQALLPAATQGNKVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60
DB 1 MNRGVPRHLLVLTQALLPAATQGNKVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60
QY 61 ILGNQSFLLTKGSPKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQSFLLTKGSPKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLLOQGSLLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDTHLLOQGSLLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCVTQONOKKVEFKIDIVVLAFOKASSIVYKKEGVQVFPPLATVEKLTGSGELMW 240
DB 181 TWTCVTQONOKKVEFKIDIVVLAFOKASSIVYKKEGVQVFPPLATVEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
QY 301 LEAKTGKLGHOENVLVVVRATQLOKNLTCEVWGPTSPKLMSTKLENKEAKYSKREKAVW 360
DB 301 LEAKTGKLGHOENVLVVVRATQLOKNLTCEVWGPTSPKLMSTKLENKEAKYSKREKAVW 360
QY 361 LNPEAGMWOCCLSDSGVLLSNIKVLPTWSTPV 396
DB 361 LNPEAGMWOCCLSDSGVLLSNIKVLPTWSTPV 396

```

RESULT 74

AAR07640

ID AAR07640 standard; protein; 2458 AA.

XX AAR07640;

DT 31-OCT-2002 (revised)

DT 20-DEC-1990 (first entry)

DE Deduced protein sequence of p170-2 comprising T4.

KM plasmid p170-2; soluble T4 protein; AIDS; ARC; HIV.

XX Synthetic.

FH Key Location/Qualifiers

FT Protein 400..858

FT /label= T4 surface glycoprotein

XX MO9008198-A.

XX 26-JUL-1990.

XX 18-JAN-1989; 89US-00300096.

XX 18-JAN-1989; 89US-00300096.

XX (HARD) HARVARD COLLEGE.

XX Letvin NA;

XX WPI; 1990-254040/33.

XX N-PSDB; AAQ05607.

PT Treating or preventing AIDS, ARC or HIV infection - by administering an
 XX immunologically effective amt. of soluble T4 protein.
 PS Disclosure; Fig 1; 121pp; English.
 CC Entire sequence from T4-encoding plasmid p170-2. It is almost identical
 CC to the sequence published by Madden et al. (1985) with the exception of
 CC three codon changes. At T4 amino acid residue 3, (posn. 403 of entire
 CC sequence) Lys is encoded in stead of Asn. At posn. 64, (posn. 464) Arg
 CC replaces Trp and at posn. 231, (posn. 631) Ser replaces Phe. Soluble T4
 CC can be produced by truncating the CDS to remove the transmembrane and
 CC cytoplasmic domains. The soluble forms may be modified to increase their
 CC immunogenicity by addition of an adjuvant such as incomplete Freund's
 CC adjuvant. The T4 interferes with HIV/T4 interaction and elicits anti-
 CC soluble T4 antibody production. See also AA005608. (Updated on 31-OCT-
 CC 2002 to add missing OS field.)
 XX
 XX Sequence 2458 AA;
 SQ
 Query Match 58.7%; Score 2002.5; DB 2; Length 2458;
 Best Local Similarity 79.7%; Pred. No. 1e-100; Mismatches 25; Indels 69; Gaps 4;
 Matches 405; Conservative 9;
 QY 1 MNRGVPFRLHLVLTALPAPATQGNKVVLGKGGDTVELTCTASQKSIQFHWKNSNOIX 60
 DB 400 MNRGVPFRLHLVLTALPAPATQGNKVVLGKGGDTVELTCTASQKSIQFHWKNSNOIX 459
 QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
 DB 460 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 519
 QY 121 LVFGLTANSPTHLLOGSLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 520 LVFGLTANSPTHLLOGSLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 579
 QY 181 TWTCTVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPPLAFVTEKLTGSGELMW 240
 DB 580 TWTCTVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPPLAFVTEKLTGSGELMW 639
 QY 241 QAEKASSSSKSWITFDLKNKEVSVKRVYTOPDKLQMGKKLPLHLTLPLALPOYAGSGNLTIA 300
 DB 640 QAEKASSSSKSWITFDLKNKEVSVKRVYTOPDKLQMGKKLPLHLTLPLALPOYAGSGNLTIA 699
 QY 301 LEAKTGLKHOEVNLYVMBRATOLQXNLTCFVWGPSPKMLSLKLEWKEAKVSKREKPVVW 360
 DB 700 LEAKTGLKHOEVNLYVMBRATOLQXNLTCFVWGPSPKMLSLKLEWKEAKVSKREKPVVW 759
 QY 361 LNPBAGMOCCLSDSGQVLLSNIKVLPWTSTPVEP----- 396
 DB 760 LNPBAGMOCCLSDSGQVLLSNIKVLPWTSTPVEP----- 819
 QY 397 -----KSCDKTH--TC-----PPCAPDELIG 415
 DB 820 RCRHRRRAERMSQIKRLLESEKTCOCPRHFGKTCSPXIGTRPGRSHLQRPQVSABRFLP 879
 QY 416 GRSVFLEPPKPKDITLMISRTPEVTCVV 443
 DB 880 ADQGMVADPPR---LASCSPLQPAIV 903
 RESULT 75
 AAR04031
 ID AAR04031 standard; protein; 2458 AA.
 XX
 AC AAR04031;
 XX
 DT 25-MAR-2003 (revised)
 DT 31-OCT-2002 (revised)
 DT 29-MAY-1990 (first entry)
 DE Full length T4 encoded by plasmid p170-2.
 XX Soluble T4; p170-2; anti-retroviral agent; AIDS; ARC; HIV; AZT.

XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT Misc-difference 423
 FT Misc-difference /note= "Trp of Madden et al replaced by Arg"
 FT Misc-difference 425
 FT Misc-difference /note= "Asp of Madden et al replaced by Lys"
 FT Misc-difference 653
 FT Misc-difference /note= "Phe of Madden et al replaced by Ser"
 XX
 XX WO8911860-A.
 XX 14-DEC-1989.
 XX
 XX 08-JUN-1989; 89WO-US002453.
 XX
 XX 10-JUN-1988; 88US-00204645.
 XX 20-APR-1989; 89US-00341080.
 XX
 XX (BIOJ) BIOGEN NV INC.
 XX (GHEO) GEN HOSPITAL CORP.
 XX (BIOJ) BIOGEN INC.
 XX (BIOJ) BIOGEN INC.
 XX
 XX Fisher RA, Schooley RT, Hirsch MS, Johnson VA, Walker BD;
 DR WPI; 1990-007302/01.
 DR N-PSDB; AA003005.
 XX
 PT Combinations of soluble T4 protein and anti-retroviral agent - having
 PT synergistic activity in treatment and prevention of AIDS, arc and HIV
 PT infection.
 XX
 XX Disclosure; Fig 1; 100pp; English.
 XX
 CC The sequence differs from that determined by PJ Madden et al., [Cell, 42
 CC pp. 93-104 (1985)] in three places due to three nucleotide substitutions.
 CC The Asp reported at position 3 by Madden et al. was the result of a
 CC sequencing error [DR Litman et al. Cell, 55, p.541 (1988)]. X = stop
 CC codon. The sequence was deduced from the cDNA insert of p170-2. Soluble
 CC T4 constructs may be produced by truncating this sequence to give
 CC fragments from position 400 to 799, removing the transmembrane and
 CC intracytoplasmic domains while retaining the extracellular region
 CC responsible for HIV binding. The sol. T4 is combined with an anti-viral
 CC agent such as AZT. See also AA003006. (Updated on 31-OCT-2002 to add
 CC missing OS field.) (Updated on 25-MAR-2003 to correct PA field.)
 XX
 SQ Sequence 2458 AA;
 Query Match 58.7%; Score 2002.5; DB 2; Length 2458;
 Best Local Similarity 79.7%; Pred. No. 1e-100;
 Matches 405; Conservative 9; Mismatches 25; Indels 69; Gaps 4;
 QY 1 MNRGVPFRLHLVLTALPAPATQGNKVVLGKGGDTVELTCTASQKSIQFHWKNSNOIX 60
 DB 400 MNRGVPFRLHLVLTALPAPATQGNKVVLGKGGDTVELTCTASQKSIQFHWKNSNOIX 459
 QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
 DB 460 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 519
 QY 121 LVFGLTANSPTHLLOGSLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 520 LVFGLTANSPTHLLOGSLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 579
 QY 181 TWTCTVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPPLAFVTEKLTGSGELMW 240
 DB 580 TWTCTVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPPLAFVTEKLTGSGELMW 639
 QY 241 QAEKASSSSKSWITFDLKNKEVSVKRVYTOPDKLQMGKKLPLHLTLPLALPOYAGSGNLTIA 300
 DB 640 QAEKASSSSKSWITFDLKNKEVSVKRVYTOPDKLQMGKKLPLHLTLPLALPOYAGSGNLTIA 699

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QY 301 LEAKTGKLEHVEVNLVVRATQLOKNTCEVWGPTSPKMLSLKLENKEAKVSKREKPVW 360
DB 700 LEAKTGKLEHVEVNLVVRATQLOKNTCEVWGPTSPKMLSLKLENKEAKVSKREKPVW 759
QY 361 LNPEAGMOCCLSDSGVLLSESNIKVLPWTSTPVP----- 396
DB 760 LNPEAGMOCCLSDSGVLLSESNIKVLPWTSTPVPMAILVGLGVALLLFGLGIFPCV 819
QY 397 -----KSCDKTH-----TC-----PPCPAPELTG 415
DB 820 RCRHRRRQAKRMSQIKRLISEKKTQCCPRFQKTSPIXTGRPGKSHUQPOVSAFRLP 879
QY 416 GPSVFLPPPKPDTLMISRTPEVTCVV 443
DB 880 ADQMWVADPR-----LASGSPLOFAIV 903

RESULT 76
AAR06373
ID AAR06373 standard; protein; 458 AA.
XX
AC AAR06373;
DT 31-OCT-2002 (revised)
DT 20-DEC-1990 (first entry)
XX
DE T4 encoded by plasmid p170-2.
XX
KM plasmid p170-2; soluble T4 protein; AIDS; ARC; HIV.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Peptide 1..23
FT Region /label= hydrophobic/secretory signal
FT Region 24..117
FT Region /label= extracellular
FT Region /note= "homology to V-regions"
FT Region 118..132
FT Region /label= extracellular
FT Region /note= "homology to J-regions"
FT Region 133..397
FT Region /label= extracellular
FT Region /note= "glycosylated region"
FT Region 398..418
FT Region /label= transmembrane sequence
FT Region /note= "hydrophobic"
FT Region 419..458
FT Region /label= intracytoplasmic
FT Region /note= "very hydrophilic"
XX
PN WO9008198-A.
XX
PD 26-JUL-1990.
XX
PF 18-JAN-1989; 89US-00300096.
XX
PR 18-JAN-1989; 89US-00300096.
XX
PA (HARD ) HARVARD COLLEGE.
XX
PI Lecvln NA;
XX
DR WPI, 1990-254040/33.
DR N-PSDB; AAQ05607.
XX
PT Treating or preventing AIDS, ARC or HIV infection - by administering an
PT immunologically effective amt. of soluble T4 protein.
XX
PS Disclosure; Fig 1; 121p; English.
XX
CC Soluble T4 can be produced by truncating the CDS to remove the

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CC transmembrane and cytoplasmic domains. The soluble forms may be modified
CC to increase their immunogenicity by addition of an adjuvant such as
CC incomplete Freund's adjuvant. The T4 interferes with HIV/T4 interaction
CC and elicits anti-soluble T4 antibody production. Soluble T4 proteins
CC include the following polypeptide fragments: amino acids 1-385, 24-385,
CC Met-24-385, 24-397, 1-400 and Met-24-400. See also AAQ05608. (updated on
CC 31-Oct-2002 to add missing OS field.)
XX
SQ Sequence 458 AA;
Query Match 58.6%; Score 2002; DB 2; Length 458;
Best Local Similarity 98.7%; Pred. No. 1,8e-101;
Matches 391; Conservative 1; Mismatches 4; Indels 0; Gaps 0;
QY 1 MNRGVPFRHLIVVQLALPAATQGNVYVGGKDDVELCTASQKKSIOFHMNSNOIK 60
DB 1 MNRGVPFRHLIVVQLALPAATQGNVYVGGKDDVELCTASQKKSIOFHMNSNOIK 60
QY 61 ILGNQGSFLTKGPSKLNDRADSRSLWDGNFPLIINKLIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQGSFLTKGPSKLNDRADSRSLWDGNFPLIINKLIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGULTNSDTHLQGGSLTLTLESPPGSSPSVQCRSPRGKNTQGGKTLISVQLDQSG 180
DB 121 LVFGULTNSDTHLQGGSLTLTLESPPGSSPSVQCRSPRGKNTQGGKTLISVQLDQSG 180
QY 181 TWCTCTVLOKQKVEFKIDIVVLAFOKASIVYKKEGGEVFPFLATVETKLTSGELMW 240
DB 181 TWCTCTVLOKQKVEFKIDIVVLAFOKASIVYKKEGGEVFPFLATVETKLTSGELMW 240
QY 241 QAERASSSKSWITFDLNNKEVSVRVTQDPKLOMGKKLPHLTLPQALPOYAGSGNLTLA 300
DB 241 QAERASSSKSWITFDLNNKEVSVRVTQDPKLOMGKKLPHLTLPQALPOYAGSGNLTLA 300
QY 301 LEAKTGKLEHVEVNLVVRATQLOKNTCEVWGPTSPKMLSLKLENKEAKVSKREKPVW 360
DB 301 LEAKTGKLEHVEVNLVVRATQLOKNTCEVWGPTSPKMLSLKLENKEAKVSKREKPVW 360
QY 361 LNPEAGMOCCLSDSGVLLSESNIKVLPWTSTPVP 396
DB 361 LNPEAGMOCCLSDSGVLLSESNIKVLPWTSTPVP 396

RESULT 77
AAP94703
ID AAP94703 standard; protein; 524 AA.
XX
AC AAP94703;
DT 25-MAR-2003 (revised)
DT 22-MAR-1991 (first entry)
XX
DE Sequence encoded by T4 lymphocyte cDNA obtained from PBL clone lambda-203
DE -4.
XX
KM HIV; soluble T4; immunotherapeutic; prophylactic; diagnostic; AIDS; ARC.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Misc-difference 67
FT Misc-difference /note= "AA DESIGNATED NUMBER -23"
FT Misc-difference 90
FT Misc-difference /note= "AA DESIGNATED NUMBER 1"
FT Misc-difference 92
FT Misc-difference /note= "MATURE N-TERMINUS"
XX
PN WO8901940-A.
XX
PD 09-MAR-1989.
XX
PF 01-SEP-1988; 88WO-US002940.
XX

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PR 04-SEP-1987; 87US-00094322.
 PR 07-JAN-1988; 88US-00141649.
 XX
 PA (BIOI) BIOGEN INC.
 XX
 PI Fisher RA, Gilbert W, Sato VL, Flavell RA, Maraganore JM;
 XX
 DR MPI; 1989-085519/11.
 XX
 DR N-PSDB; AAN90642.
 XX
 PT DNA sequences coding for soluble T4-like polypeptide(s) - used in
 PT immuno:therapeutic and immunosuppressive comps. and for preventing,
 PT treating or detecting AIDS.
 XX
 PS Disclosure; Fig 3; 207pp; English.
 XX
 CC The polypeptides encoded are useful in immunotherapeutic, prophylactic
 CC and diagnostic comps. They can be used to purify HIV from a sample. The
 CC soluble T4 protein-based comps. are useful in treating immunodeficient
 CC patients suffering from diseases caused by agents whose primary targets
 CC are T4+ lymphocytes. They can be used for preventing, treating or
 CC detecting AIDS, ARC and HIV infection. (Updated on 25-MAR-2003 to correct
 CC PR field.)
 XX
 SQ Sequence 524 AA;
 Query Match 58.6%; Score 2002; DB 1; Length 524;
 Best Local Similarity 98.7%; Pred. No. 2.1e-101;
 Matches 391; Conservative 1; Mismatches 4; Indels 0; Gaps 0;
 QY 1 NMRGVFPHLLLVQALPPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
 DB 67 NMRGVFPHLLLVQALPPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 126
 QY 61 ILNGGSSFLTGKPSKLNDRADRSRSLMDQGNPPLIRKLIKIEDSDTYICEVEDQKEEYOL 120
 DB 127 ILNGGSSFLTGKPSKLNDRADRSRSLMDQGNPPLIRKLIKIEDSDTYICEVEDQKEEYOL 186
 QY 121 LVFGILTANSDTHLLOQGSITLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 187 LVFGILTANSDTHLLOQGSITLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 246
 QY 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYVKKGEQVEFSPPLAFTVEKLTGSGELMW 240
 DB 247 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYVKKGEQVEFSPPLAFTVEKLTGSGELMW 306
 QY 241 QABRASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPLQALPOVAGSGNLTIA 300
 DB 307 QABRASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPLQALPOVAGSGNLTIA 366
 QY 301 LEAKTGKLGHEVNLVVMRATOLQKNLTCEVNGPTSPKMLSLKENKEAKVSKREKPYWV 360
 DB 367 LEAKTGKLGHEVNLVVMRATOLQKNLTCEVNGPTSPKMLSLKENKEAKVSKREKPYWV 426
 QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVE 396
 DB 427 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVE 462
 RESULT 78
 AAB07768
 ID AAB07768 standard; protein; 394 AA.
 XX
 AC AAB07768;
 XX
 DT 07-NOV-2000 (first entry)
 XX
 DE The soluble extracellular domain of the T4 glycoprotein.
 XX
 KW Human; T4 glycoprotein; human immunodeficiency virus; HIV;
 KW envelope glycoprotein; AIDS; virus binding.
 XX
 OS Homo sapiens.

XX
 PN US6093539-A.
 XX
 PD 25-JUL-2000.
 XX
 PF 06-JUN-1995; 95US-00466368.
 XX
 PR 21-AUG-1986; 86US-00898587.
 PR 11-JUN-1991; 91US-00713554.
 PR 06-JUL-1992; 92US-00909021.
 PR 12-DEC-1994; 94US-00354452.
 XX
 PA (UYCO) UNIV COLUMBIA NEW YORK.
 XX
 PI Maddon PJ, Chess L, Axel R, Weiss R, McDougal JS, Littman DR;
 XX
 DR MPI; 2000-505203/45.
 XX
 DR N-PSDB; AAA59351.
 XX
 PT New isolated nucleic acid encoding a human T cell surface protein and the
 PT soluble surface T4 glycoprotein that it encodes, useful as prophylaxis
 PT for treating a subject infected with human acquired immune deficiency
 PT syndrome virus.
 XX
 PS Disclosure; Col 11-14; 69pp; English.
 XX
 CC The present sequence represents an aqueous-soluble polypeptide comprising
 CC a portion of a human T4 glycoprotein. The portion specifically forms a
 CC complex with a human immunodeficiency virus (HIV) envelope glycoprotein.
 CC The DNA is useful for producing the soluble surface T4 glycoprotein. The
 CC soluble surface T4 glycoprotein is useful as a therapeutic agent, i.e. as
 CC prophylaxis for treating a subject infected with an HIV virus. Thus, the
 CC soluble T4 glycoprotein is useful for treating human AIDS. The soluble T4
 CC glycoprotein is also useful in diagnostic or screening assays, e.g. for
 CC screening inhibitors of virus binding, or for detecting and quantitating
 CC T4, T4+ cells and antibodies to T4, which are of diagnostic value for
 CC AIDS
 XX
 SQ Sequence 394 AA;
 Query Match 58.6%; Score 2001; DB 3; Length 394;
 Best Local Similarity 98.7%; Pred. No. 1.7e-101;
 Matches 389; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
 QY 1 NMRGVFPHLLLVQALPPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
 DB 1 NMRGVFPHLLLVQALPPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
 QY 61 ILNGGSSFLTGKPSKLNDRADRSRSLMDQGNPPLIRKLIKIEDSDTYICEVEDQKEEYOL 120
 DB 61 ILNGGSSFLTGKPSKLNDRADRSRSLMDQGNPPLIRKLIKIEDSDTYICEVEDQKEEYOL 120
 QY 121 LVFGILTANSDTHLLOQGSITLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGILTANSDTHLLOQGSITLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYVKKGEQVEFSPPLAFTVEKLTGSGELMW 240
 DB 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYVKKGEQVEFSPPLAFTVEKLTGSGELMW 240
 QY 181 TWTCTVLQNKQKVEFKIDIVLAFOKASSIYVKKGEQVEFSPPLAFTVEKLTGSGELMW 240
 DB 241 QABRASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPLQALPOVAGSGNLTIA 300
 QY 241 QABRASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPLQALPOVAGSGNLTIA 300
 DB 241 QABRASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPLQALPOVAGSGNLTIA 300
 QY 301 LEAKTGKLGHEVNLVVMRATOLQKNLTCEVNGPTSPKMLSLKENKEAKVSKREKPYWV 360
 DB 301 LEAKTGKLGHEVNLVVMRATOLQKNLTCEVNGPTSPKMLSLKENKEAKVSKREKPYWV 360
 QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV 394
 DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV 394

[illegible]

QY		241	QAERASSSKSTTPDLNKKVEVSRVTDDPKLQMCKLPILHTLPALFOYGSGMLTLA	300
Db		241	QAERASSSKSTTPDLNKKVEVSRVTDDPKLQMCKLPILHTLPALFOYGSGMLTLA	300
QY		301	LEAKGKGLHGEVNLTVMRATOLQKLTEGVMPGPSPLMLSLKENKEAVSREKRPVVV	360
Db		301	LEAKGKGLHGEVNLTVMRATOLQKLTEGVMPGPSPLMLSLKENKEAVSREKRPVVV	360
QY		361	LNPEAGMWQCCLISDSGOVLLESNIKVLPTWSTPVED	396
Db		361	LNPEAGMWQCCLISDSGOVLLESNIKVLPTWSTPVED	396
<hr/>				
RESULT 80				
AAR11285		ID	AAR11285 standard; protein; 458 AA.	
XX		AC	AAR11285;	
XX		DT	25-MAR-2003 (revised)	
XX		DT	09-JAN-2003 (revised)	
XX		DT	29-APR-1991 (first entry)	
XX		DE	gpi20 binding protein.	
XX		KM	Human; CD4; AIDS; HIV1; SIV; gpi20.	
OS		OS	Unidentified.	
XX		FH	Key Location/Qualifiers	
FT		FT	Misc-difference 59 /label= Thr or Ile	
FT		FT	Misc-difference 93 /label= Thr or Pro	
XX		PN	EP414178-A.	
XX		PD	27-FEB-1991.	
XX		PF	18-AUG-1990; 90EP-00115877.	
XX		PR	23-AUG-1989; 89US-00397782.	
PA		PA	(GENO) GEN HOSPITAL CORP.	
XX		PI	Seed B, Camerini D;	
XX		DR	WPI; 1991-059419/09.	
XX		DR	N-Psdb; AAO10887.	
XX		PT	New non-human primate and human CD4 or gpi20 molecules - used to treat	
XX		PT	HIV or SIV and immunoglobulin and gpi20 binding molecules from new fusion	
PS		PS	proteins.	
XX		PS	Claim 17; Page 57; 87pp; English.	
CC		CC	The frgment from residues 1-134 is also independently claimed. The sub-	
CC		CC	fragment (and the complete polypeptide) can bind to HIV gpi20. See also	
CC		CC	AAQ10885-6, AAO10888. (Updated on 09-JAN-2003 to add missing OS field.)	
CC		CC	(Updated on 25-MAR-2003 to correct PA field.)	
XX		XX	Sequence 458 AA;	
<hr/>				
QY		Query Match	58.6%; Score 2000; DB 2; Length 458;	
		Best Local Similarity	98.2%; Pred. No. 2,3e-101;	
		Matches 389; Conservative	2; Mismatches 5; Indels 0; Gaps 0	
Db		1	MNRGVPFPHLLLVQLALLPATOGNKTVLGKGSDTVELTCASOKKSIOFHMKNSNOIK	60
		1	MNRGVPFPHLLLVQLALLPATOGKKVVLGGKGDVETCTCASOKKSIOFHMKNSNOIX	60
QY		61	ILGNQGSFLTKGPSTLNDRADSRSLMDQGNFPILLIKNLKIEDSDTYICEVEDQKEVOI	120

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Db      61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFLLIKNLKIBDSPTYICEVGDQKEEVL 120
Qy      121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELDQSG 180
Db      121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELDQSG 180
Qy      181 TWTCTVLQNOQKKEFKIDIVVLAFOKASSIVYKKEGOVEFSPLAFTVEKLTGSGELMW 240
Db      181 TWTCTVLQNOQKKEFKIDIVVLAFOKASSIVYKKEGOVEFSPLAFTVEKLTGSGELMW 240
Qy      241 QAEKASSSKSWITFDLKNKEVSVKRVTQDPKLOMGKKLPLHLTPQALPOYAGSGNLTLA 300
Db      241 QAEKASSSKSWITFDLKNKEVSVKRVTQDPKLOMGKKLPLHLTPQALPOYAGSGNLTLA 300
Qy      301 LEAKTGKLGHOEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPVW 360
Db      301 LEAKTGKLGHOEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPVW 360
Qy      361 LNPEAGMOCCLSDSGVLLSNIKYVLPWTSTPVEP 396
Db      361 LNPEAGMOCCLSDSGVLLSNIKYVLPWTSTPVEP 396

```

RESULT 81

AAR10988
ID AAR10988 standard; protein; 458 AA.

AC AAR10988;

DT 25-MAR-2003 (revised)
DT 29-APR-1991 (first entry)

DE Chimpanzee CD4 protein.

KW Chimpanzee; CD4; AIDS; HIV1; SIV.

OS Pan troglodytes.

PH Key Location/Qualifiers
FT Protein /label= mature CD4

PN EP414178-A.

PD 27-FEB-1991.

PF 18-AUG-1990; 90BP-00115877.

PR 23-AUG-1989; 89US-00397782.

PA (GEHO) GEN HOSPITAL CORP.

PI Seed B, Camerini D;

DR MPI: 1991-059419/09.

DR N-PSDB; AAQ10886.

PT New non-human primate and human CD4 or gp120 molecules - used to treat
PT HIV or SIV and immunoglobulin and gp120 binding molecules from new fusion
PT proteins.

PS Claim 4; Page 45; 87pp; English.

XX The CD4 protein or HIV gp120-binding fragments of it are used to detect
XX and treat HIV and SIV infection. Animals which can be treated include
XX humans, baboons, orang-utans, chimpanzees, gorillas and rhesus monkeys.

CC The chimpanzee CD4 is 99 per cent homologous to its human counterpart,
CC possessing 5 amino acid substitutions in the 433 residue predicted mature
CC polypeptide. See also AAQ10885, AAQ10887-8. (Updated on 25-MAR-2003 to
CC correct PA field.)

XX Sequence 458 AA;

Query Match 58.6%; Score 2000; DB 2; Length 458;
Best Local Similarity 98.2%; Pred. No. 2.3e-101;
Matches 389; Conservative 1; Mismatches 6; Indels 0; Gaps 0;

```

Qy      1 NMRGVPFHLLLVLTALLPAATQGNKVLGKGGTVELCTASQKSIQPFMKNSNOIK 60
Db      1 NMRGVPFHLLLVLTALLPAATQGNKVLGKGGTVELCTASQKSIQPFMKNSNOIK 60
Qy      61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFLLIKNLKIBDSPTYICEVGDQKEEVL 120
Db      61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFLLIKNLKIBDSPTYICEVGDQKEEVL 120
Qy      121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELDQSG 180
Db      121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELDQSG 180
Qy      181 TWTCTVLQNOQKKEFKIDIVVLAFOKASSIVYKKEGOVEFSPLAFTVEKLTGSGELMW 240
Db      181 TWTCTVLQNOQKKEFKIDIVVLAFOKASSIVYKKEGOVEFSPLAFTVEKLTGSGELMW 240
Qy      241 QAEKASSSKSWITFDLKNKEVSVKRVTQDPKLOMGKKLPLHLTPQALPOYAGSGNLTLA 300
Db      241 QAEKASSSKSWITFDLKNKEVSVKRVTQDPKLOMGKKLPLHLTPQALPOYAGSGNLTLA 300
Qy      301 LEAKTGKLGHOEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPVW 360
Db      301 LEAKTGKLGHOEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPVW 360
Qy      361 LNPEAGMOCCLSDSGVLLSNIKYVLPWTSTPVEP 396
Db      361 LNPEAGMOCCLSDSGVLLSNIKYVLPWTSTPVEP 396

```

RESULT 82

AAR20150
ID AAR20150 standard; protein; 400 AA.

AC AAR20150;

DT 25-MAR-2003 (revised)
DT 31-MAR-1992 (first entry)

DE Chimpanzee sol. CD4 sequence from pSQ205.

KW Human immunodeficiency virus; HIV; gp 120; AIDS; ARC; glycoprotein;

KW acquired immune deficiency syndrome; AIDS related complex;

XX T helper lymphocytes.

OS Pan troglodytes.

PH Key Location/Qualifiers
FT Peptide 1..25
FT /label= signal_sequence

PN WO9118618-A.

PD 12-DEC-1991.

PF 25-MAY-1990; 90US-00529186.

PR 25-MAY-1990; 90US-00529186.

PA (BIOJ) BIOGEN INC.

PI Fisher RA, Hession C, Burkly LC;

DR MPI: 1992-007200/01.

DR N-PSDB; AAQ20325.

PT New immuno-therapeutic human CD4 variants and derivs. - elicit AB
PT production to HIV gp.120, useful in treating, preventing and diagnosing
PT AIDS, ARC and HIV infections.

```

XX  Claim 15; Fig 20; 179pp; English.
PS
XX  The sequence was deduced from the DNA sequence of clone pSO205 which was
CC  obtd. by cloning using a reverse transcriptase/PCR amplification
CC  procedure. The DNA sequence can be used to express recombinant soluble
CC  CD4 and analogues for use in diagnosis and treatment of diseases caused
CC  by infective agents whose primary targets are T4+ lymphocytes. See also
CC  AAR20148-R20155 and AAR21078. (Updated on 25-MAR-2003 to correct PA
CC  field.)
XX
SQ  Sequence 400 AA:
Query Match      58.4%; Score 1995; DB 2; Length 400;
Best Local Similarity 98.0%; Pred. No. 3.7e-101;
Matches 388; Conservative 2; Mismatches 6; Indels 0; Gaps 0;

QY  1 MNRGVPFRHLLVLTALLPATQGNKVLGKGGTVELTCTASQKSIQFHMKNNSQIK 60
DB  1 MNRGVPFRHLLVLTALLPATQGNKVLGKGGTVELTCTASQKSIQFHMKNNSQIK 60
QY  61 ILNGGSLFKGSPSKLNDRADSRSLMDQGNFPLIINKLTIEDSDTYICEVEDQKEEVOL 120
DB  61 ILNGGSLFKGSPSKLNDRADSRSLMDQGNFPLIINKLTIEDSDTYICEVEDQKEEVOL 120
QY  121 LVFGLTASDTHLLQGQSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB  121 LVFGLTASDTHLLQGQSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY  181 TWTCVTLONQKKEFKIDIVVLAFOKASSIVYKKEGEVFSPLATFVEKLTGSGELMW 240
DB  181 TWTCVTLONQKKEFKIDIVVLAFOKASSIVYKKEGEVFSPLATFVEKLTGSGELMW 240
QY  191 TWTCVTLONQKKEFKIDIVVLAFOKASSIVYKKEGEVFSPLATFVEKLTGSGELMW 240
DB  191 TWTCVTLONQKKEFKIDIVVLAFOKASSIVYKKEGEVFSPLATFVEKLTGSGELMW 240
QY  241 QAERASSKSMWTFPLKNKEVSVKRVTDPKLQMGKPLPHLTLPOLPOYAGSGNLTIA 300
DB  241 QAERASSKSMWTFPLKNKEVSVKRVTDPKLQMGKPLPHLTLPOLPOYAGSGNLTIA 300
QY  241 QAERASSKSMWTFPLKNKEVSVKRVTDPKLQMGKPLPHLTLPOLPOYAGSGNLTIA 300
DB  241 QAERASSKSMWTFPLKNKEVSVKRVTDPKLQMGKPLPHLTLPOLPOYAGSGNLTIA 300
QY  301 LEAKTGKLGHEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAVSKREKPVV 360
DB  301 LEAKTGKLGHEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAVSKREKPVV 360
QY  361 LNPEAGMWOCILSDSGVLLSNNIKVLPWTSTPVP 396
DB  361 LNPEAGMWOCILSDSGVLLSNNIKVLPWTSTPVP 396

RESULT 83
AAR04910
ID  AAR04910 standard; protein; 458 AA.
XX
XX  AAR04910;
AC  AA
XX  31-OCT-2002 (revised)
DT  02-OCT-1990 (first entry)
XX
XX  T4 protein as encoded by p170.2.
DE
XX
XX  T4 protein; immunotoxin; Pseudomona endotoxin A; AIDS; HIV; ARC;
KW  angiotensin; fusion protein.
XX
OS  Synthetic.
XX
XX  Key Location/Qualifiers
XX  Peptide 1..26
XX  Protein /label= signal peptide
XX  27..458
XX  Misc-difference /label= T4 protein
XX  replace(87,W)
XX  /note= "differs from Madden et al"
XX  Misc-difference /note= "differs from Madden et al"
XX  replace(254,P)
XX
PN  MO9004414-A.

```

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XX  03-MAY-1990.
XX
XX  18-OCT-1988; 88US-00259355.
XX
XX  18-OCT-1988; 88US-00259355.
XX
XX  (BIOJ ) BIOGEN INC.
XX
XX  Meade HM, Lobb RR, Gates LL, Winkler G;
XX
XX  WPI; 1990-163876/21.
XX
XX  N-PSDB; AAQ04555.
XX
XX  New immunotoxin contg. soluble T4 protein components and toxin - esp.
XX  Pseudomonas endotoxin A, for treating or controlling AIDS and related
XX  conditions, and new DNA sequences.
XX
XX  Disclosure; Page 7; -pp; English.
XX
XX  The T4 protein encoded by p170.2 is almost identical to that reported by
XX  P.J. Madden et al (Cell, 42, pp 93-104 (1985)). The Madden sequence was
XX  revised in 1988 to correct a DNA sequencing error at AA 3 (corrected from
XX  Asp to Lys; see M12807 in GenBank). The DNA may be truncated (to remove
XX  transmembrane and intracellular regions) and/or modified by SDM, pref. so
XX  the prod. extends from AAs 3-183 of the mature protein. This DNA can then
XX  be ligated to a toxin DNA esp. angiotensin, or a fragment of Pseudomonas
XX  exotoxin A contg. the translocation and ADP-ribosylation domains. The
XX  hybrid DNA can then be inserted into an expression vector and used to
XX  produce recombinant fusion protein which is useful for preventing or
XX  treating AIDS, ARC, and HIV infections. The T4 protein is an HIV receptor
XX  which binds to virus or to infected cells carrying the gp120/160 marker
XX  antigen, so provides v. specific targeting with minimal damage to non-
XX  target cells. (Updated on 31-OCT-2002 to add missing OS field.)
XX
SQ  Sequence 458 AA:
Query Match      58.4%; Score 1994; DB 2; Length 458;
Best Local Similarity 98.2%; Pred. No. 4.9e-101;
Matches 389; Conservative 3; Mismatches 4; Indels 0; Gaps 0;

QY  1 MNRGVPFRHLLVLTALLPATQGNKVLGKGGTVELTCTASQKSIQFHMKNNSQIK 60
DB  1 MNRGVPFRHLLVLTALLPATQGNKVLGKGGTVELTCTASQKSIQFHMKNNSQIK 60
QY  61 ILNGGSLFKGSPSKLNDRADSRSLMDQGNFPLIINKLTIEDSDTYICEVEDQKEEVOL 120
DB  61 ILNGGSLFKGSPSKLNDRADSRSLMDQGNFPLIINKLTIEDSDTYICEVEDQKEEVOL 120
QY  121 LVFGLTASDTHLLQGQSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB  121 LVFGLTASDTHLLQGQSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY  181 TWTCVTLONQKKEFKIDIVVLAFOKASSIVYKKEGEVFSPLATFVEKLTGSGELMW 240
DB  181 TWTCVTLONQKKEFKIDIVVLAFOKASSIVYKKEGEVFSPLATFVEKLTGSGELMW 240
QY  181 TWTCVTLONQKKEFKIDIVVLAFOKASSIVYKKEGEVFSPLATFVEKLTGSGELMW 240
DB  181 TWTCVTLONQKKEFKIDIVVLAFOKASSIVYKKEGEVFSPLATFVEKLTGSGELMW 240
QY  241 QAERASSKSMWTFPLKNKEVSVKRVTDPKLQMGKPLPHLTLPOLPOYAGSGNLTIA 300
DB  241 QAERASSKSMWTFPLKNKEVSVKRVTDPKLQMGKPLPHLTLPOLPOYAGSGNLTIA 300
QY  241 QAERASSKSMWTFPLKNKEVSVKRVTDPKLQMGKPLPHLTLPOLPOYAGSGNLTIA 300
DB  241 QAERASSKSMWTFPLKNKEVSVKRVTDPKLQMGKPLPHLTLPOLPOYAGSGNLTIA 300
QY  301 LEAKTGKLGHEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAVSKREKPVV 360
DB  301 LEAKTGKLGHEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKEAVSKREKPVV 360
QY  361 LNPEAGMWOCILSDSGVLLSNNIKVLPWTSTPVP 396
DB  361 LNPEAGMWOCILSDSGVLLSNNIKVLPWTSTPVP 396

RESULT 84
AAP93010
ID  AAP93010 standard; protein; 399 AA.

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XX AAP93010;
AC 25-MAR-2003 (revised)
XX 03-AUG-1992 (first entry)
DT
XX
DE Genetic construct which encodes CD4 linked to human IgM at the Mat2 site
XX upstream of the CH1 region (fusion protein CD4Mmu).
XX
XX Fusion protein; immunoglobulin-like molecule; HIV; SIV; therapy;
XX diagenosis; CD4; gp120; binding fragment; glycoprotein; variable region.
XX Homo sapiens.
XX
XX EP325262-A.
XX
XX 26-JUL-1989.
XX
XX 20-JAN-1989; 89EP-00100913.
XX
XX 22-JAN-1988; 88US-00147351.
XX
XX (GENO ) GEN HOSPITAL CORP.
XX
XX Seed B;
XX
XX WPI, 1989-214472/30.
XX
XX N-PSDB; AAN90358.
XX
XX Immunoglobulin-CD4 fusion proteins - used for treating HIV or SIV
XX infections or detecting HIV or SIV in sample.
XX
XX Example; Table 3, Page 34-40; 68pp; English.
XX
XX The fusion protein genes of the invention pref. comprises cDNA sequences
XX which encode CD4 or a fragment which binds gp120 ligated to an expression
XX plasmid which encodes an antibody in which the variable region of the
XX gene has been deleted (see WO87-02671). The CD4 portion of the fusion
XX protein may comprise the complete CD4 sequence, the 370 AA extracellular
XX region and the membrane spanning domain, or the extracellular region. The
XX Ig heavy chain is pref. from IgM, IgG1 or IgG3. The following are
XX specifically claimed: fusion proteins CD4lambda1, CD4Mmu, CD4Pmu,
XX CD4lambda1, and CD4Mmu (No. 67609), PCDAplambda (No. 67609) and
XX PCDAlambda1 (No. 67610). (Updated on 25-MAR-2003 to correct PA field.)
XX
XX Sequence 399 AA;
SQ
Query Match 58.1%; Score 1982; DB 1; Length 399;
Best Local Similarity 98.5%; Pred. No. 1.9e-100;
Matches 388; Conservative 1; Mismatches 5; Indels 0; Gaps 0;
QY 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
DB 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
QY 61 ILGNQSSFLTKGSSKLNDRADSRSLMDQGNPFLIKNLIKIESDYITICEVEDQKEEYVL 120
DB 61 ILGNQSSFLTKGSSKLNDRADSRSLMDQGNPFLIKNLIKIESDYITICEVEDQKEEYVL 120
QY 121 LVFGLTANSDTHLLOQSLTLTLESPGSSPVQCSPPGKNIQGGKTLVSQLELDQSDG 180
DB 121 LVFGLTANSDTHLLOQSLTLTLESPGSSPVQCSPPGKNIQGGKTLVSQLELDQSDG 180
QY 121 LVFGLTANSDTHLLOQSLTLTLESPGSSPVQCSPPGKNIQGGKTLVSQLELDQSDG 180
DB 121 LVFGLTANSDTHLLOQSLTLTLESPGSSPVQCSPPGKNIQGGKTLVSQLELDQSDG 180
QY 181 TWTCVTLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSEPLAFTVEKLTGSGELMW 240
DB 181 TWTCVTLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSEPLAFTVEKLTGSGELMW 240
QY 241 QAEERASSSKSWITFDLKKEVSVKRTQPKLOMKKULPLHLTLPALQYVAGSGNLTIA 300
DB 241 QAEERASSSKSWITFDLKKEVSVKRTQPKLOMKKULPLHLTLPALQYVAGSGNLTIA 300
QY 301 LEAKTGKLTQHOEVNLVVMRATQLOKNTLCEVWGPTSPKMLSLKEKEAKVSKREKPVAV 360
DB 301 LEAKTGKLTQHOEVNLVVMRATQLOKNTLCEVWGPTSPKMLSLKEKEAKVSKREKPVAV 360

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DB 301 LEAKTGKLTQHOEVNLVVMRATQLOKNTLCEVWGPTSPKMLSLKEKEAKVSKREKPVAV 360
QY 361 LNPEAGMWQCLLSDSGOVLLESNTKVLPTWSTPV 394
DB 361 LNPEAGMWQCLLSDSGOVLLESNTKVLPTWSTPV 394
RESULT 85
AAR20154
ID AAR20154 standard; protein; 400 AA.
XX
XX AAR20154;
AC 24-OCT-2003 (revised)
XX 25-MAR-2003 (revised)
DT 31-MAR-1992 (first entry)
XX
XX Sol. rhesus-human chimeric CD4 encoded by pDG100.
XX
XX Human immunodeficiency virus; HIV; gp 120; AIDS; ARC; glycoprotein;
XX acquired immune deficiency syndrome; AIDS related complex; monkey;
XX T helper lymphocytes.
XX
XX Macaca mulatta; (Rhesus).
XX
XX Homo sapiens.
XX
XX Chimeric.
XX
XX Key Location/Qualifiers
FH FT 1..131
FT /note= "rhesus CD4 encoded by pSQ146 (AAQ20328)"
FT Peptide 1..25
FT /label= signal_sequence
FT Region 132..400
FT /note= "human CD4 encoded by pBG391 (US8802940)"
XX
XX MO9118618-A.
XX
XX 12-DEC-1991.
XX
XX 25-MAY-1990; 90US-00529186.
XX
XX 25-MAY-1990; 90US-00529186.
XX
XX (BIOG ) BIOGEN INC.
XX
XX Fisher RA, Hession C, Burkly LC;
XX
XX WPI; 1992-007200/01.
XX
XX N-PSDB; AAQ20329.
XX
XX New immuno-therapeutic human CD4 variants and derivs. - elicit AB
XX production to HIV gp.120, useful in treating, preventing and diagnosing
XX AIDS, ARC and HIV infections.
XX
XX Claim 14; Fig 13; 179pp; English.
XX
XX The sequence is encoded by pDG100, chimeric plasmid prepd. from human and
XX rhesus derived CD4 DNA. The plasmid can be used to express recombinant
XX sol. chimeric CD4 for use in diagnosis and treatment of diseases caused
XX by infective agents whose primary targets are T4+ lymphocytes. See also
XX AAR20148-R2015 and AAR21078. (Updated on 25-MAR-2003 to correct PA
XX field.) (Updated on 24-OCT-2003 to standardise OS field)
XX
XX Sequence 400 AA;
SQ
Query Match 57.3%; Score 1955; DB 2; Length 400;
Best Local Similarity 95.5%; Pred. No. 5.7e-99;
Matches 378; Conservative 10; Mismatches 8; Indels 0; Gaps 0;
QY 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60
DB 1 MNRGVPFRHLLVLTQALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNSNOIK 60

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Oy      6  ILNQSQFLTKGSKJDNBADSRRSLMDQGNPLLIKNLKIEDSPYIACEVEDQKEVOL 120
Db      61  ILGIQSFPLTKGSKJDNBADSRRSLMDQGCFSMILIKNLKIEDSTYICEVENKKEVEL 120
Oy      121  LVEGLTANSPDTHLLOQOSLTLTLSPGSGSPVQCRSPRGNNIOGKTLISVQLELDQSG 180
Db      121  LVFGLTANSPDTHLLEQOSLTLTLSPGSGSPVQCRSPRGNNIOGKTLISVQLELDQSG 180
Oy      181  TWTCTVLQNKQKVEFKIDIVLAFOQASSIYVKKEGEVESPPLAFTVEKLTGSGELMW 240
Db      181  TWTCTVLQNKQKVEFKIDIVLAFOQASSIYVKKEGEVESPPLAFTVEKLTGSGELMW 240
Oy      241  QAERASSKSWITFDLKNKEVSKRYTODPKLOMGKPLHLTLPOLPOYAGSGNLTTLA 300
Db      241  QAERASSKSWITFDLKNKEVSKRYTODPKLOMGKPLHLTLPOLPOYAGSGNLTTLA 300
Oy      301  LEAKTGTLQHEVULVYMRATLOLOKULTCEVWSPSTPKMLSLKLNKEAKVSKREKRVWY 360
Db      301  LEAKTGTLQHEVULVYMRATLOLOKULTCEVWSPSTPKMLSLKLNKEAKVSKREKRVWY 360
Oy      361  LNPEAGMOCCLSDSGOVLLESNIKULPTWSTPVER 396
Db      361  LNPEAGMOCCLSDSGOVLLESNIKULPTWSTPVER 396

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RESULT	86
AAR15149	
ID	AAR15149 standard; protein; 458 AA.
XX	
AC	AAR15149;
XX	
DT	25-MAR-2003 (revised)
DT	24-FEB-1992 (first entry)
XX	
DE	CD4 coordinate system.
XX	
KW	Gelsolin; fusion protein; diagnosis; AIDS.
XX	
OS	Homo sapiens.
XX	
FH	Key
FT	Location/Qualifiers
FT	1..25
FT	/label= hydrophobic/secretory_signal
FT	26..132
FT	/label= first_Ig-related_domain
FT	/note= "extracellular"
FT	41..109
FT	/label= second_Ig-related_domain
FT	133..202
FT	/note= "extracellular"
FT	155..184
FT	Domain
FT	203..318
FT	/label= third_Ig-related_domain
FT	/note= "extracellular"
FT	319..395
FT	/label= fourth_Ig-related_domain
FT	/note= "extracellular"
FT	328..370
FT	Disulfide-bond
FT	396..416
FT	/label= hydrophobic/transmembrane_sequences
FT	417..458
FT	/label= very_hydrophilic/intracytoplasmic
XX	
EN	MO9117170-A.
XX	
PD	14-NOV-1991.
XX	
PF	04-MAY-1990;
XX	
PR	04-MAY-1990;
XX	
PA	(BIOJ) BIOGEN INC.
XX	

P1 Peginsky RB, Rosa MD, Strossel TP;
 XX WPI: 1991-355711/48.
 DR N-PSDB: AAQ14931.
 XX
 XX New multi-meric and hetero-multi-meric gelosolin fusion constructs - used
 FT to treat and diagnose AIDS, AKC and HIV infection.
 XX
 XX Disclosure; Fig 3A-3D; 131pp; English.
 XX
 XX The CD4 polypeptides useful in the constructs include all CD4
 CC polypeptides which bind to or otherwise inhibit gp120 and gp160. These
 CC include fragments lacking the transmembrane domain. In particular it is
 CC CD4 1-111; 1-Cys111; 1-Cys180; 1-181, 1-183; 1-187; 1-345 or 1-375 (from
 CC mature protein). See also AAQ14931-35 and AA15151. (updated on 25-MAR-
 CC 2003 to correct PA field.)
 XX
 XX Sequence 458 AA;
 XQ

Query Match	56.5%	Score 1930	DB 2	Length 458		
Best Local Similarity	94.9%	Pred. No. 1.5e-97				
Matches 376	Conservative 8	Mismatches 12	Indels 0	Gaps 0		
Qy	1	MNRGVPFRHLILVQLALLPATOGKNVVLGKKGDYELTCTASQKKSIOFHMKNSNQIK	60			
Db	1	MNRGVPFRHLILVQLALLPATOGKKVVLGKGDYELTCTASQKKSIOFHMKNSNQIK	60			
Qy	61	ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEVQL	120			
Db	61	ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEVQL	120			
Qy	121	LVFGLTANSDFHLLIQGQSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG	180			
Db	121	LVFGLTAKCEDVEGEVSILTTERGGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG	180			
Qy	181	TWTCVTIONOKKVEFKDIDVLAFOKASSIYKKEGEOVESPLAFTVEKLTGSGELMW	240			
Db	181	TWTCVTIONOKKVEFKDIDVLAFOKASSIYKKEGEOVESPLAFTVEKLTGSGELMW	240			
Qy	241	QAEBASSSKSWITFDLNKKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA	300			
Db	241	QAEBASSSKSWITFDLNKKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA	300			
Qy	301	LEATGTGLHGEVNLVVMRATOLQKNLTCEVWGPTSPKLMLSLKLENKAKVSKREKPVWV	360			
Db	301	LEATGTGLHGEVNLVVMRATOLQKNLTCEVWGPTSPKLMLSLKLENKAKVSKREKPVWV	360			
Qy	361	LNPEAGMWQCLLSDSGOVLLESNIKVLPTWSTPVP	396			
Db	361	LNPEAGMWQCLLSDSGOVLLESNIKVLRTWSTPVP	396			
RESULT 87						
AAR41042						
ID	AAR41042 standard; protein; 729 AA.					
XX						
XX	AAR41042;					
XX						
DT	24-OCT-2003	(revised)				
DT	25-MAR-2003	(revised)				
DT	22-MAR-1994	(first entry)				
XX						
DE	CD4-GBPH fusion protein.					
XX						
KW	Merozoite; Glycophorin Binding Protein homologue; malaria; HIV; env;					
KW	human immunodeficiency virus; envelope glycoprotein; hybrid protein;					
KW	red blood cell; erythrocyte; AIDS.					
XX						
OS	Homo sapiens.					
OS	Plasmodium falciparum.					
OS	Chimeric.					
XX						
XX						
Key	Location/Qualifiers					


```

FT Region 1..371
FT /note="residues 1-371 of CD4"
FT Region 372..729
FT /note="residues 70-427 of GBPH"
XX
XX MO9318160-A1.
XX
XX 16-SEP-1993.
XX
XX 10-MAR-1993; 93WO-GB000505.
XX
XX 11-MAR-1992; 92GB-00005276.
XX 08-JUL-1992; 92GB-00014481.
XX 24-JUL-1992; 92GB-00015829.
XX 16-SEP-1992; 92GB-00019562.
XX 03-MAR-1993; 93GB-00004311.
XX
XX (PREN/) PRENDERGAST K F.
XX
XX Prendergast KF;
XX
XX WPI; 1993-303474/38.
XX
XX Anti-viral fusion peptide(s) - comprise viral-binding component and
XX malaria merozoite red cell binding component, for creating e.g. HIV, and
XX hepatitis.
XX
XX Claim 7; Page 40-41; 69pp; English.
XX
XX The hybrid protein NH2-CD4(1-371)-GBPH(70-427)-COOH is a specifically
XX claimed example of a fusion protein of the invention; it comprises at
XX least part of the CD4 molecule fused to a peptide from a malarial
XX parasite merozoite protein with affinity for red blood cells. The fusion
XX protein can bind free HIV in the blood to red blood cells and
XX consequently reduce viral titre, prevent transmission of the virus and
XX improve safety of blood transfusions. (Updated on 25-MAR-2003 to correct
XX PN field.) (Updated on 24-OCT-2003 to standardise OS field)
XX
XX Sequence 729 AA;
XX
XX Query Match 56.5%; Score 1928.5; DB 2; Length 729;
XX Best Local Similarity 63.6%; Pred. No. 3e-97;
XX Matches 435; Conservative 34; Mismatches 98; Indels 117; Gaps 19;
XX
XX 24 OGNKVVLGKGGDPVELTCTASOKKSTIQFMKNSNOIKIINGGSPFTKGPSKLNDRADR 83
XX 1 OGNKVVLGKGGDPVELTCTASOKKSTIQFMKNSNOIKIINGGSPFTKGPSKLNDRADR 60
XX
XX 84 RSLMDQGNFPLIINKLKIEDSDTYICEVEDOKEVQLVFGLTANSHTLLOGSITLTL 143
XX 61 RSLMDQGNFPLIINKLKIEDSDTYICEVEDOKEVQLVFGLTANSHTLLOGSITLTL 120
XX
XX 144 EEPFGSSPSVOCSPRGKNIQGGKITLSVQLELDOSGWTCTVLONQKVEFKIDIVLA 203
XX 121 EEPFGSSPSVOCSPRGKNIQGGKITLSVQLELDOSGWTCTVLONQKVEFKIDIVLA 180
XX
XX 204 FQKASSTIVKKGEOVFESFPLAFTYEKLTGSGELMOMERASSSSSWTTPPLKXKEV 263
XX 181 FQKASSTIVKKGEOVFESFPLAFTYEKLTGSGELMOMERASSSSSWTTPPLKXKEV 240
XX
XX 264 KKVTDQPKLQMGKULPLHLTPQALPQVAGSGLTLALBAKTKLQHEVNLVVMRATOLQ 323
XX 241 KKVTDQPKLQMGKULPLHLTPQALPQVAGSGLTLALBAKTKLQHEVNLVVMRATOLQ 300
XX
XX 324 KKLTCGVWGPSTPKMLSLKLNKEAKVSKREKPVWNLPEAGMOCCLISDGOVLLESN 383
XX 301 KKLTCGVWGPSTPKMLSLKLNKEAKVSKREKPVWNLPEAGMOCCLISDGOVLLESN 360
XX
XX 384 IKVLPTWSTPV-----EPKSDKTHTCPCCPAPPELLGGSVFLFPKX 425
XX 361 IKVLPTWSTPVGOYKOADYSFRESRVLAEGSKTSKN-----AKTAL-----RK 405
XX
XX 426 PDKTLMISRTPEVTCVVVDVSHEDPEVKENWYVDGVEVNAKTKPREEOYNST----- 478

```

```

DB 406 TKQTLTTSADPEQG--IMKAWAADPEYRKHLNVLYQILNN--TDPNDELSTSDPEQIM 461
QY 479 -----YRVSVTLVHODPLNGEKYCKKSNKALPAPIEKTISKAKGQREPVYTL 530
DB 462 KAYAADPEYR--KHLNVLYQ--ILNNTDPNDEVESSADP--EGQIMKA-----YAA 506
QY 531 PPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNQPEN-----NYKTTPEVL----- 577
DB 507 DP---EYRKHVNVLYQILNNTDPND---ELETSADPEQIMKAYAADPEYRKHVNVLYQI 560
QY 578 --DSDGSFFLYSKLTVDSKRWQGNVFSK-----SYMHEALNNHYTQKSLISLP 624
DB 561 LNHTDSS-----EVEITSADPEQIMKAYAADPEYRKHVNVLYQIL--NHTDSSSV----- 608
QY 625 GLQDELTCFAEDGELDGLMTTDP 648
DB 609 -----ETSAD--PEQIMKAYAADP 626

RESULT 88
AAP90833
ID AAP90833 standard; protein; 384 AA.
XX
XX AAP90833;
XX
XX 25-MAR-2003 (revised)
XX 01-AUG-1990 (first entry)
XX
XX Amino acid sequence of a soluble T4-like (874) polypeptide encoded by a
XX portion of clone p199-7 (PL mutet.r874).
XX
XX HIV: immunotherapeutic; prophylactic; soluble T4-like polypeptide;
XX diagnostic; p199-7 (PL mutet.r874).
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX FT Misc-difference 10 /note="initiating Met"
XX FT
XX PN WO8901940-A.
XX PD 09-MAR-1989.
XX
XX PF 01-SEP-1988; 88WO-US002940.
XX
XX PR 04-SEP-1987; 87US-00094322.
XX PR 07-JAN-1988; 88US-00141649.
XX
XX PA (BIOI ) BIOGEN INC.
XX
XX PI Fisher RA, Gilbert W, Sato VL, Flavell RA, Maraganore JM;
XX DR WPI; 1989-085519/11.
XX DR N-PSDB; AAN90643.
XX
XX PT DNA sequences coding for soluble T4-like polypeptide(s) - used in
XX PT immuno;therapeutic and immunosuppressive comps. and for preventing,
XX PT treating or detecting AIDS.
XX
XX PS Disclosure; Page 7; 207pp; English.
XX
XX CC It is the protein sequence encoded by the r874 sequence. It is claimed in
XX CC the patent. It is useful in immunotherapeutic, prophylactic and
XX CC diagnostic comps. It can be used to purify HIV from a sample. (Updated
XX CC on 25-MAR-2003 to correct PR field.)
XX
XX SQ Sequence 384 AA;
XX
XX Query Match 56.2%; Score 1917; DB 1; Length 384;
XX Best Local Similarity 99.5%; Pred. No. 6.5e-97;
XX Matches 371; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

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```

QY 24 QGNKRVLGKGGDTVELTCTASQKSIQPHMKNNSNOIKILNGQSFLLTKGPKLNDRADSR 83
DB 11 QGNKRVLGKGGDTVELTCTASQKSIQPHMKNNSNOIKILNGQSFLLTKGPKLNDRADSR 70
QY 84 RSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQLLVFGLTANSDTHLLQGQSLTTL 143
DB 71 RSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQLLVFGLTANSDTHLLQGQSLTTL 130
QY 144 ESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSGTWCTVLONQKVEFKIDIVLA 203
DB 131 ESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSGTWCTVLONQKVEFKIDIVLA 190
QY 204 FOKASSIYKKEGEQVEFSPLAFTVEKLTGSGELMWQAEKRASSKSWITFDLKNKEVS 263
DB 191 FOKASSIYKKEGEQVEFSPLAFTVEKLTGSGELMWQAEKRASSKSWITFDLKNKEVS 250
QY 264 KRVTQDPKLOMGKCLPHLTLTPQALPOYAGSGNLTLEAKTGKLGHOEVNLVVMRATOLQ 323
DB 251 KRVTQDPKLOMGKCLPHLTLTPQALPOYAGSGNLTLEAKTGKLGHOEVNLVVMRATOLQ 310
QY 324 KNLTCVWGPSTSPKMLSLKENKEAVSKREKPVWVLPNPAQMWQCCLSDSGVLLSESN 383
DB 311 KNLTCVWGPSTSPKMLSLKENKEAVSKREKPVWVLPNPAQMWQCCLSDSGVLLSESN 370
QY 384 IKVLPTWSTPVEP 396
DB 371 IKVLPTWSTPVEP 383

RESULT 89
AAR41041
ID AAR41041 standard; protein; 942 AA.
XX
AC AAR41041;
XX
DT 24-OCT-2003 (revised)
DT 25-MAR-2003 (revised)
DT 22-MAR-1994 (first entry)
XX
DE CD4-GBP130 fusion protein.
XX
KW Merozoite; Glycophorin Binding Protein 130; malaria; HIV; env;
KW human immunodeficiency virus; envelope glycoprotein; hybrid protein;
KW red blood cell; erythrocyte; AIDS.
XX
OS Homo sapiens.
OS Plasmodium falciparum.
OS Chimeric.
XX
FH Key Location/Qualifiers
FT 1..371
FT /note="residues 1-371 of CD4"
FT Region 372..942
FT /note="residues 201-774 of GBP130"
XX
PN MO9318160-A1.
XX
PD 16-SEP-1993.
XX
PF 10-MAR-1993; 93WO-GB000505.
XX
PR 11-MAR-1992; 92GB-00005276.
PR 08-JUL-1992; 92GB-00014481.
PR 24-JUL-1992; 92GB-00015829.
PR 16-SEP-1992; 92GB-00019562.
PR 03-MAR-1993; 93GB-00004311.
XX
PA (PREN/) PRENDERGAST K F.
XX
PI Prendergast KF;
XX
DR WPI, 1993-303474/38.

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XX
PT Anti-viral fusion peptide(s) - comprise viral-binding component and
PT malaria merozoite red cell binding component, for treating e.g. HIV, and
PT hepatitis.
XX
PS Claim 2; Page 35-37; 69pp; English.
XX
CC The hybrid protein NH2-CD4(1-371)-GBP130(201-774)-COOH is a specifically
CC claimed example of a fusion protein of the invention; it comprises at
CC least part of the CD4 molecule fused to a peptide from a malarial
CC parasite merozoite protein with affinity for red blood cells. The fusion
CC protein can bind free HIV in the blood to red blood cells and
CC consequently reduce viral titre, prevent transmission of the virus and
CC improve safety of blood transfusions. (Updated on 25-MAR-2003 to correct
CC PN field.) (Updated on 24-OCT-2003 to standardise OS field)
XX
SQ Sequence 942 AA:
Query Match 56.1%; Score 1915; DB 2; Length 942;
Best Local Similarity 97.6%; Pred. No. 2.2e-96;
Matches 372; Conservative 1; Mismatches 8; Indels 0; Gaps 0;
QY 24 QGNKRVLGKGGDTVELTCTASQKSIQPHMKNNSNOIKILNGQSFLLTKGPKLNDRADSR 83
DB 1 QGNKRVLGKGGDTVELTCTASQKSIQPHMKNNSNOIKILNGQSFLLTKGPKLNDRADSR 60
QY 84 RSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQLLVFGLTANSDTHLLQGQSLTTL 143
DB 61 RSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQLLVFGLTANSDTHLLQGQSLTTL 120
QY 144 ESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSGTWCTVLONQKVEFKIDIVLA 203
DB 121 ESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSGTWCTVLONQKVEFKIDIVLA 180
QY 204 FOKASSIYKKEGEQVEFSPLAFTVEKLTGSGELMWQAEKRASSKSWITFDLKNKEVS 263
DB 181 FOKASSIYKKEGEQVEFSPLAFTVEKLTGSGELMWQAEKRASSKSWITFDLKNKEVS 240
QY 264 KRVTQDPKLOMGKCLPHLTLTPQALPOYAGSGNLTLEAKTGKLGHOEVNLVVMRATOLQ 323
DB 241 KRVTQDPKLOMGKCLPHLTLTPQALPOYAGSGNLTLEAKTGKLGHOEVNLVVMRATOLQ 300
QY 324 KNLTCVWGPSTSPKMLSLKENKEAVSKREKPVWVLPNPAQMWQCCLSDSGVLLSESN 383
DB 301 KNLTCVWGPSTSPKMLSLKENKEAVSKREKPVWVLPNPAQMWQCCLSDSGVLLSESN 360
QY 384 IKVLPTWSTPVEPSCDKTHT 404
DB 361 IKVLPTWSTPVSQKPTSTRS 381

RESULT 90
AAR41043
ID AAR41043 standard; protein; 1786 AA.
XX
AC AAR41043;
XX
DT 24-OCT-2003 (revised)
DT 25-MAR-2003 (revised)
DT 22-MAR-1994 (first entry)
XX
DE CD4-EBA175 fusion protein.
XX
KW Merozoite; Erythrocyte Binding Antigen 175; malaria; HIV; env;
KW human immunodeficiency virus; envelope glycoprotein; hybrid protein;
KW red blood cell; erythrocyte; AIDS; molecular machine.
XX
OS Homo sapiens.
OS Plasmodium falciparum.
OS Chimeric.
XX
FH Key Location/Qualifiers
FT 1..371
FT Region

```

FT	FT	Region	/note= "residues 1-371 of CD4" 372..1786
FT	FT		/note= "residues 20-1435 of EBA-175"
XX	XX	MO9318160-A1.	
XX	XX	16-SEP-1993.	
XX	XX	10-MAR-1993;	93WO-GB000505.
XX	XX	11-MAR-1993;	92GB-00005276.
XX	XX	08-JUL-1993;	92GB-00014481.
XX	XX	24-JUL-1992;	92GB-00015829.
XX	XX	16-SEP-1992;	92GB-00019562.
XX	XX	03-MAR-1993;	93GB-00004311.
XX	XX	(PREN/) PRENDERGAST K F.	
XX	XX	Prendergast KF;	
XX	XX	WPI, 1993-103474/38.	
XX	XX	Anti-viral fusion peptide(s) - comprise viral-binding component and	
XX	XX	malaria merozoite red cell binding component, for treating e.g. HIV, and	
XX	XX	hepatitis.	
XX	XX	Claim 9; Page 44-47; 69pp; English.	
XX	XX	The hybrid protein NH2-CD4(1-371)-EBA175(20-1435)-COOH is a specifically	
XX	XX	claimed example of a fusion protein of the invention; it comprises at	
XX	XX	least part of the CD4 molecule fused to a peptide from a malarial	
XX	XX	parasite merozoite protein with affinity for red blood cells. The fusion	
XX	XX	protein can bind free HIV in the blood to red blood cells and	
XX	XX	consequently reduce viral titre, prevent transmission of the virus and	
XX	XX	improve safety of blood transfusions. (Updated on 25-MAR-2003 to correct	
XX	XX	PN field.) (Updated on 24-OCT-2003 to standardise OS field)	
XX	XX	Sequence 1786 AA;	
XX	XX	Query Match	56.0%; Score 1911; DB 2; Length 1786;
XX	XX	Best Local Similarity	98.7%; Pred. No. 76-96; 2; Indels 0; Gaps 0;
XX	XX	Matches 370; Conservative 3; Mismatches 2; Indels 0; Gaps 0;	
QY	24	QGNKTVLGKGGDTVELCTTASQKSIQFHMKNNSNOIKILGNQGSFLTQKPSKLANDRADSR	83
DB	1	QGNKTVLGKGGDTVELCTTASQKSIQFHMKNNSNOIKILGNQGSFLTQKPSKLANDRADSR	60
QY	84	RLSLDQGNFPLIIKNIKIEDSDTYICEVEDQKEVQLLVFGLTANSDFHLLQGSFLTTL	143
DB	61	RLSLDQGNFPLIIKNIKIEDSDTYICEVEDQKEVQLLVFGLTANSDFHLLQGSFLTTL	120
QY	144	ESPPSSSPBVOGRSRGKNIQGGKTLVSQLELDQSGTWTCTVNLQNKVKEKIDIVILA	203
DB	121	ESPPSSSPBVOGRSRGKNIQGGKTLVSQLELDQSGTWTCTVNLQNKVKEKIDIVILA	180
QY	204	FOKASSIYVKKGEQVEFSFLAFTVEKLTSGGELMWOERASSSSKSNITFPLKXKEVS	263
DB	101	FOKASSIYVKKGEQVEFSFLAFTVEKLTSGGELMWOERASSSSKSNITFPLKXKEVS	240
QY	264	KRVTDPKLQMGKULPLHLTPQALPOYAGSGLTALAEAKTGLKHOEVNLVWMRATOLQ	323
DB	241	KRVTDPKLQMGKULPLHLTPQALPOYAGSGLTALAEAKTGLKHOEVNLVWMRATOLQ	300
QY	324	KULTEWGPSTSPKMLSLIKLENKAKYSKREKPVVNLNPEAGMOCILSDSGQVLLSN	383
DB	301	KULTEWGPSTSPKMLSLIKLENKAKYSKREKAVVNLNPEAGMOCILSDSGQVLLSN	360
QY	384	IKVLPSTSPVPEKS 398	
DB	361	IKVLPSTSPVPEKS 375	

[illegible]

```
Db      356 KNLTCCEVWGPTSPKLMSTLKENKEAKVSKREKAVVWLNPEAGMWQCLLSDSGVLLSESN 415
Qy      384 IKVLPWTWSTP 393
      |||||
Db      416 IKVLPWTWSTP 425

RESULT 92
AAP93557
ID      AAP93557 standard; protein; 434 AA.
XX
XX      AAP93557;
AC
XX      25-MAR-2003 (revised)
DT      03-OCT-2002 (revised)
DT      06-JUN-1990 (first entry)
XX
DE      Fusion of the herpes gD leader and N-terminal 27 residues to mature N-
DE      terminus of CD4T.
XX
XX      Adheson variant; CD4T; soluble CD4; truncated CD4; antiviral; HIV;
XX      herpes gD; immunomodulatory; diagnostic.
XX
XX      Homo sapiens.
OS
XX      WO8902922-A.
XX      06-APR-1989.
XX      03-OCT-1988; 88WO-US003414.
XX      02-OCT-1987; 87US-00104329.
XX      28-SEP-1988; 88US-00250785.
XX
XX      (GETH ) GENENTECH INC.
XX      Capon DJ, Gregory TJ;
XX      WPI, 1989-114397/15.
XX      N-PsDB; AAN90735.
XX
XX      New nucleic acid sequences encoding adheson, esp. CD 4, variants -
XX      parvic. with trans-membrane domain inactivated or fused to other peptide,
XX      useful esp. for treating HIV infections.
XX
XX      Fig 2A-2C; pp. 5/13-8/13; 78pp; English.
XX
XX      CD4T is a truncated or soluble variant of CD4. CD4T fusion proteins can
XX      have antiviral and immunomodulatory activity and are esp. useful for
XX      treating HIV infections, regardless of genetic variation within the
XX      virus. CD4T fusion proteins, and antibodies raised against them, can also
XX      be used diagnostically for assaying adhesons and their ligands. (Updated
XX      on 03-OCT-2002 to add missing OS field.) (Updated on 25-MAR-2003 to
XX      correct PR field.) (Updated on 25-MAR-2003 to correct PA field.)
XX
XX      Sequence 434 AA;
SQ

Query Match      55.8%; Score 1904; DB 1; Length 434;
Best Local Similarity 99.7%; Pred. No. 3.8e-96;
Matches 369; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
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```
Qy      204 FQKASIVYKKEGQVEFSPEPLAFTVEKLTGSGELMWQAERASSSKSMITFDLKNKEVSV 263
      |||||
Db      236 FQKASIVYKKEGQVEFSPEPLAFTVEKLTGSGELMWQAERASSSKSMITFDLKNKEVSV 295
Qy      264 KRVYQDPKLGKGLPLHLTLPOLPQYAGSGNITLLEAKTGKLBQEVNLVYMRATQLO 323
      |||||
Db      296 KRVYQDPKLGKGLPLHLTLPOLPQYAGSGNITLLEAKTGKLBQEVNLVYMRATQLO 355
Qy      324 KNLTCCEVWGPTSPKLMSTLKENKEAKVSKREKAVVWLNPEAGMWQCLLSDSGVLLSESN 383
      |||||
Db      356 KNLTCCEVWGPTSPKLMSTLKENKEAKVSKREKAVVWLNPEAGMWQCLLSDSGVLLSESN 415
Qy      384 IKVLPWTWSTP 393
      |||||
Db      416 IKVLPWTWSTP 425

RESULT 93
AAR07721
ID      AAR07721 standard; protein; 375 AA.
XX
XX      AAR07721;
AC
XX      25-MAR-2003 (revised)
DT      18-FEB-1991 (first entry)
XX
DE      Recombinant soluble (re) T4.
XX
XX      Metal-binding site.
XX
XX      Homo sapiens.
OS
XX      WO9012803-A.
XX      01-NOV-1990.
XX      14-APR-1989; 89US-00338991.
XX      14-APR-1989; 89US-00338991.
XX      14-APR-1989; 89US-00338991.
XX
XX      (BIOJ ) BIOGEN INC.
XX      (BIOJ ) BIOGEN INC.
XX      Staples MA, Pargellis CA;
XX
XX      WPI; 1990-348421/46.
XX
XX      Purifying protein having surface metal-binding amino acid residues -
XX      using an immobilised metal affinity chromatography resin.
XX
XX      Disclosure; Fig 2; 36pp; E.
XX
XX      The re T4 can be purified from a crude sample (Updated on 25-MAR-2003 to
XX      correct PA field.)
XX
XX      Sequence 375 AA;
SQ

Query Match      55.7%; Score 1903; DB 2; Length 375;
Best Local Similarity 99.2%; Pred. No. 3.7e-96;
Matches 368; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```

QY 206 KASSIVYKKEGEVFEFPLAFTVEKLTGSGELMWQAEARASSKSNITFDLKNKEVSVKR 265
XX |||||
DB 181 KASSIVYKKEGEVFEFPLAFTVQKLTGSGELMWQAEARASSKSNITFDLKNKEVSVKR 240
XX |||||
QY 266 VTQDPKLGKGLPLHLTLPOLPYAGSGNLTLEAKTGKHOEVNLVWMRATOLQKN 325
XX |||||
DB 241 VTQDPKLGKGLPLHLTLPOLPYAGSGNLTLEAKTGKHOEVNLVWMRATOLQKN 300
XX |||||
QY 326 LTCEVWGPTSPKMLSLKLENKEAKVSKREKPYWVLNPEAGMOCCLSDSGVLTLESNIK 385
XX |||||
DB 301 LTCEVWGPTSPKMLSLKLENKEAKVSKREKAVWVLNPEAGMOCCLSDSGVLTLESNIK 360
XX |||||
QY 386 VLPTWSTPVEP 396
XX |||||
DB 361 VLPTWSTPVEP 371
XX |||||

RESULT 94
AAW41376 standard; peptide; 433 AA.
ID AAW41376;
AC AAW41376;
XX
XX
DT 28-MAY-1998 (first entry)
XX
DE Human CD4.
XX
KM Antibody; CD4; passive immunity; HIV type 1; HIV type 2; HIV infection;
KW Bimlan Immunodeficiency virus; SIV; AIDS; therapy; HIV gp120.
XX
OS Homo sapiens.
XX
PN MO9746697-A2.
XX
PD 11-DEC-1997.
XX
PF 03-JUN-1997; 97WO-US009449.
XX
PR 03-JUN-1996; 96US-00657149.
PR 28-FEB-1997; 97US-00808374.
PR 02-JUN-1997; 97US-00867149.
XX
PA (UNBI-) UNITED BIOMEDICAL INC.
XX
PI Wang CY;
XX
DR WPI; 1998-042204/04.
XX
PT Antibody against complex of CD4 and chemokine receptor domain - useful
PT for prevention and treatment of human immunodeficiency virus infection.
XX
XX Disclosure; Page 122-123; 140pp; English.
XX
XX This sequence represents human CD4, and was used to isolate the antibody
CC (Ab) of the invention. The Ab, preferably a M2 or B13 Ab, has the
CC following characteristics: (a) binds rCD4; (b) binds CD4 expressing
CC cells in an immunofluorescence assay, where the binding pattern is in the
CC shape of "cap", when examined with a high resolution fluorescence
CC microscope; (c) blocks the binding of HIV glycoprotein 120 (gp120) to CD4
CC expressing cells; (d) binds CD4 expressing cells previously bound with
CC gp120; and (e) neutralises HIV primary isolates in an in vitro
CC microplaque assay at a concentration of less than 10 mu g/ml, preferably
CC at a concentration in the range of 0.01-10 mu g/ml for 50% neutralisation
CC and 0.1-35 mu g/ml for 90% neutralisation. The Ab can be used to provide
CC passive immunity to HIV in a mammal, when administered parenterally,
CC specifically all clades of HIV type 1, and from diverse primary isolates
CC of HIV type 2 and simian immunodeficiency virus (SIV). The Ab is
CC prophylactic and therapeutic for HIV infection and all stages of AIDS
CC because it prevents replicative infection of host cells both before and
CC after HIV gp120 has bound to the host cell antigen complex comprising CD4
CC on the surface of CD4 positive lymphocytes, thus it is capable of
CC preventing HIV infection and retarding the spread of the virus to
CC uninfected cells. It is also uniquely useful because it inhibits

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```

CC infection following binding of HIV to CD4 expressing cells
XX
XX
SQ Sequence 433 AA;
XX
Query Match 55.7%; Score 1901; DB 2; Length 433;
Best Local Similarity 99.2%; Pred. No. 5, 5e-96;
Matches 368; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 26 NRVVLGKKGDVTELTCTASQKKSIOFHMKNSNQIKILNQGSFLTKGPSKLNDRADSRRS 85
XX |||||
DB 1 NRVVLGKKGDVTELTCTASQKKSIOFHMKNSNQIKILNQGSFLTKGPSKLNDRADSRRS 60
XX |||||
QY 86 LMDQGNFPLIINKLIEBDDTYICEVEDQKEEVQLVFGLTANSDTHLLQGSLTTLTES 145
XX |||||
DB 61 LMDQGNFPLIINKLIEBDDTYICEVEDQKEEVQLVFGLTANSDTHLLQGSLTTLTES 120
XX |||||
QY 146 PPGSSPSVQCRSPRKNIQGGKTLISVSOLELDSDGTWTCTVLQNKVVEFKIDIVLAFQ 205
XX |||||
DB 121 PPGSSPSVQCRSPRKNIQGGKTLISVSOLELDSDGTWTCTVLQNKVVEFKIDIVLAFQ 180
XX |||||
QY 206 KASSIVYKKEGEVFEFPLAFTVEKLTGSGELMWQAEARASSKSNITFDLKNKEVSVKR 265
XX |||||
DB 181 KASSIVYKKEGEVFEFPLAFTVEKLTGSGELMWQAEARASSKSNITFDLKNKEVSVKR 240
XX |||||
QY 266 VTQDPKLGKGLPLHLTLPOLPYAGSGNLTLEAKTGKHOEVNLVWMRATOLQKN 325
XX |||||
DB 241 VTQDPKLGKGLPLHLTLPOLPYAGSGNLTLEAKTGKHOEVNLVWMRATOLQKN 300
XX |||||
QY 326 LTCEVWGPTSPKMLSLKLENKEAKVSKREKPYWVLNPEAGMOCCLSDSGVLTLESNIK 385
XX |||||
DB 301 LTCEVWGPTSPKMLSLKLENKEAKVSKREKPYWVLNPEAGMOCCLSDSGVLTLESNIK 360
XX |||||
QY 386 VLPTWSTPVEP 396
XX |||||
DB 361 VLPTWSTPVEP 371
XX |||||

RESULT 95
AA54500 standard; protein; 433 AA.
ID AA54500;
AC AA54500;
XX
XX
DT 25-APR-2000 (first entry)
XX
DE Amino acid sequence of the human CD4 protein.
XX
XX Human; CD4 protein; antigenic peptide; CDR2-like domain; apoptosis;
KW syncytia formation; human immune deficiency virus; HIV binding;
KW CD4-Class II interaction; immunisation; CD4 surface complex;
KW immune response; transplant rejection; autoimmune disease;
KW Rheumatoid arthritis; systemic lupus erythematosus; psoriasis.
XX
XX Homo sapiens.
XX
OS
XX
FH Key Location/Qualifiers
FT Domain 27..66
FT "note="CDR-2 like domain; specifically claimed in claim
1"
XX
PN MO967294-A1.
XX
PD 29-DEC-1999.
XX
PF 21-JUN-1999; 99WO-US014030.
XX
PR 20-JUN-1999; 98US-00100409.
XX
PA (UNBI-) UNITED BIOMEDICAL INC.
XX
PI Wang CY;
XX
DR WPI; 2000-160579/14.

```

XX New antigenic peptide from the CDR2 domain of CD4, for immunization
PT against e.g. human immune deficiency virus.
XX
PS Claim 1; Page 70-71; 106pp; English.
XX
CC The present sequence represents the human CD4 protein. The specification
CC describes antigenic peptides derived from the CDR2-like domain of CD4
CC (amino acids 27-66 of AAY54500). These antigenic peptides present
CC neutralising receptor/co-receptor effector sites of the CDR2-like domain.
CC The peptides evoke effective antibody responses by having optimised site-
CC specificity. The induced antibodies block human immune deficiency virus
CC (HIV) binding and syncytia formation. They may also block CD4-Class II
CC interactions with other cells, deliver signals to T cells (inhibiting
CC normal CD4-mediated immunoregulatory functions) or induce apoptosis of
CC CD4 cells by simultaneous engagement of T cell receptors. Conjugates and
CC peptides containing the antigenic peptides are used for active
CC immunisation to generate antibodies against CD4 surface complexes,
CC especially to prevent binding of HIV to CD4 and thus HIV infection, but
CC also to treat undesirable immune responses such as transplant rejection,
CC or autoimmune diseases (rheumatoid arthritis, systemic lupus
CC erythematosus or psoriasis). These conjugates produce high-titre
CC antibodies which are broadly neutralising against primary isolates from
CC all classes of HIV-1 and of HIV-2. The peptides may be cyclically
CC constrained and may include a promiscuous T helper epitope that is active
CC in genetically diverse subjects
XX
SQ Sequence 433 AA;

Query Match 55.5%; Score 1896; DB 3; Length 433;
Best Local Similarity 99.2%; Pred. No. 1e-95;
Matches 367; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 27 KVLGKGGDTVELTCTASQKKSIOFHWKNSNOIKILNGSGFLTKGSPKLNDRADSRSL 86
DB 2 KVLGKGGDTVELTCTASQKKSIOFHWKNSNOIKILNGSGFLTKGSPKLNDRADSRSL 61
QY 87 WDGNFPLIIKNIKIEDSDTYICEVEDQKEEVQLVFGLTANSPTHLLOGOSLTLTLESP 146
DB 62 WDGNFPLIIKNIKIEDSDTYICEVEDQKEEVQLVFGLTANSPTHLLOGOSLTLTLESP 121
QY 147 PGSSPSVQCRSPRGKNIQGGKTLVSQLELDSDGTWCTVLOQNKVEFKIDIVLAFQK 206
DB 122 PGSSPSVQCRSPRGKNIQGGKTLVSQLELDSDGTWCTVLOQNKVEFKIDIVLAFQK 181
QY 207 ASSIVYKKEGBOVEFSPLAFVTEKLTGSGELMWQARASSSKSWITFDLNKKEVSXRV 266
DB 182 ASSIVYKKEGBOVEFSPLAFVTEKLTGSGELMWQARASSSKSWITFDLNKKEVSXRV 241
QY 267 TQDPKLGKGLPLHLTPQALPOYAGSGNLTALBAKTKGLHDEVNLVVMRATQLOKRL 326
DB 242 TQDPKLGKGLPLHLTPQALPOYAGSGNLTALBAKTKGLHDEVNLVVMRATQLOKRL 301
QY 327 TCEVWGPTSPKLMLSLKLENKEAKVSKREKPVWVNLPEAGMOCILSDSGVLLLESNIKV 386
DB 302 TCEVWGPTSPKLMLSLKLENKEAKVSKREKPVWVNLPEAGMOCILSDSGVLLLESNIKV 361
QY 387 LPTWSTFVEP 396
DB 362 LPTWSTFVOP 371

RESULT 96
AAR74222
ID AAR74222 standard; protein; 432 AA.
XX
XX AAR74222;
AC
XX
XX 25-MAR-2003 (revised)
DT 26-NOV-1995 (first entry)
XX
XX Epitope on the primary CD4 sequence.
DE
XX

KW Chimaeric; mutant; mapping; immunodiagnostics.
XX
XX Synthetic.
OS
XX
XX US5411861-A.
EN
XX
PD 02-MAY-1995.
XX
XX 27-FEB-1992; 92US-00842465.
PF
XX 15-APR-1988; 88US-00181826.
PR
XX (GEO) GEN HOSPITAL CORP.
PA
PI Seed B, Peterson A;
XX
XX WPI; 1995-178122/23.
DR
XX
XX Mutational analysis method for protein epitope(s) - by expressing mutant
PT cDNA and using negative and positive selection to identify binding loss
PT mutants.
PS Disclosure; Fig 2; 28pp; English.
XX
XX The sequence is that of an epitope on the primary CD4 sequence. The
CC epitope sequence can be identified by vector pIHM. The See also
CC AAR74221. (Updated on 25-MAR-2003 to correct PF field.)
CC
XX
SQ Sequence 432 AA;

Query Match 55.4%; Score 1893; DB 2; Length 432;
Best Local Similarity 99.2%; Pred. No. 1.5e-95;
Matches 367; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 27 KVLGKGGDTVELTCTASQKKSIOFHWKNSNOIKILNGSGFLTKGSPKLNDRADSRSL 86
DB 1 KVLGKGGDTVELTCTASQKKSIOFHWKNSNOIKILNGSGFLTKGSPKLNDRADSRSL 60
QY 87 WDGNFPLIIKNIKIEDSDTYICEVEDQKEEVQLVFGLTANSPTHLLOGOSLTLTLESP 146
DB 61 WDGNFPLIIKNIKIEDSDTYICEVEDQKEEVQLVFGLTANSPTHLLOGOSLTLTLESP 120
QY 147 PGSSPSVQCRSPRGKNIQGGKTLVSQLELDSDGTWCTVLOQNKVEFKIDIVLAFQK 206
DB 121 PGSSPSVQCRSPRGKNIQGGKTLVSQLELDSDGTWCTVLOQNKVEFKIDIVLAFQK 180
QY 207 ASSIVYKKEGBOVEFSPLAFVTEKLTGSGELMWQARASSSKSWITFDLNKKEVSXRV 266
DB 181 ASSIVYKKEGBOVEFSPLAFVTEKLTGSGELMWQARASSSKSWITFDLNKKEVSXRV 240
QY 267 TQDPKLGKGLPLHLTPQALPOYAGSGNLTALBAKTKGLHDEVNLVVMRATQLOKRL 326
DB 241 TQDPKLGKGLPLHLTPQALPOYAGSGNLTALBAKTKGLHDEVNLVVMRATQLOKRL 300
QY 327 TCEVWGPTSPKLMLSLKLENKEAKVSKREKPVWVNLPEAGMOCILSDSGVLLLESNIKV 386
DB 301 TCEVWGPTSPKLMLSLKLENKEAKVSKREKPVWVNLPEAGMOCILSDSGVLLLESNIKV 360
QY 387 LPTWSTFVEP 396
DB 361 LPTWSTFVOP 370

RESULT 97
AAY30514
ID AAY30514 standard; protein; 432 AA.
XX
XX AAY30514;
AC
XX
XX 15-NOV-1999 (first entry)
DT
XX
XX Predicted sequence of the CD4 protein.
DE
XX

KM	CD4 protein; rapid mutational analysis method; protein epitope mapping;
KW	binding domain mapping; binding capacity; anti-CD2 antibody;
KM	anti-CD4 antibody; ligand binding site study.
XX	
OS	Homo sapiens.
XX	
PN	US5955264-A.
XX	
PD	21-SEP-1999.
XX	
PF	11-OCT-1994; 94US-00320663.
XX	
PR	15-APR-1988; 88US-00181825
PR	27-FEB-1992; 92US-00842465.
XX	
PA	(GEHO) GEN HOSPITAL CORP.
XX	
PI	Seed B, Peterson A;
XX	
DR	WPI, 1999-550602/46.
XX	
PT	Rapid mutational analysis method for mapping protein epitopes.
XX	
PS	
XX	
XX	Example 4; Fig 4; 27pp; English.
CC	
CC	The present sequence represents the predicted sequence of the CD4
CC	protein. The protein is used to demonstrate the method of the invention.
CC	The specification describes a rapid mutational analysis method for
CC	mapping protein epitopes and binding domains, by identifying substitution
CC	mutations that result in the loss of binding capacity. The method may be
CC	used for mapping protein epitopes, antigenic domains and binding sites.
CC	It has been used for mapping binding sites for sixteen anti-CD2 and anti-
CC	CD4 monoclonal antibodies. The method is especially useful for ligand
CC	binding site studies for the design of new ligands and drugs

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Db      241  |TQDPKLGWKKLPHLTLTPQALPOYAGSGNLTALAEATGKHQEVNLVYWRATQLQKNL| 300
Qy      327  TCEVWGPTSPKMLSLKLENKEAKVSKREKPVWVNLNPEAGWMOCLLSDSGVLLSNIKV 386
Db      301  TCEVWGPTSPKMLSLKLENKEAKVSKREKPVWVNLNPEAGWMOCLLSDSGVLLSNIKV 360
Qy      387  LPTWSTPVP 396
Db      361  LPTWSTPVP 370

RESULT 99
AA39824
ID      AAY39824 standard; protein; 369 AA.
XX
AC      AAY39824;
XX
DT      03-DEC-1999 (first entry)
XX
DE      Soluble human T4 protein.
XX
KM      Soluble T4 protein; sT4; human; HIV; binding inhibitor; T4+ cell; AIDS;
XX      vaccine; immunisation; therapy.
XX      Homo sapiens.
XX      OS
XX      US5958678-A.
XX      PN
XX      28-SEP-1999.
XX      PF
XX      12-DEC-1994; 94US-00354452.
XX      PR
XX      21-AUG-1986; 86US-00898587.
XX      PR      11-JUN-1991; 91US-00713564.
XX      PR      06-JUL-1992; 92US-00909021.
XX      PA
XX      (UYCO ) UNIV COLUMBIA NEW YORK.
XX      PI
XX      McDougal JS, Weiss R, Axel R, Littman DR, Madden PJ, Chess L;
XX      WPI; 1999-561025/47.
XX      DR
XX      Human T4 protein inhibits HIV binding to T4 cells, useful for treating
XX      AIDS.
XX      PT
XX      Human T4 protein inhibits HIV binding to T4 cells, useful for treating
XX      AIDS.
XX      PS
XX      Claim 1; Col 51-53; 58pp; English.
XX
CC      This sequence represents the soluble human T4 protein of the invention.
CC      The soluble human T4 protein blocks the binding of HIV to T4+ cells and
CC      is therefore useful for the treatment of AIDS. Monoclonal antibodies
CC      against the T4 protein may be used as vaccines for immunising subjects
CC      against AIDS.
XX
SQ      Sequence 369 AA;

Query Match      55.4%; Score 1891; DB 2; Length 369;
Best Local Similarity 99.7%; Pred. No. 1.6e-95;
Matches 367; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      27  KVLGKGDVVELTCTASQKSIQFHWKNSNQIKILNGSFLTKGPKLNDRADSRSL 86
Db      2   KVLGKGDVVELTCTASQKSIQFHWKNSNQIKILNGSFLTKGPKLNDRADSRSL 61
Qy      87  WDOGFPILITKLIKIEDSDTYICEVEDQKEVQLLVFGITANSDFHLIQGSLTTLTLESP 146
Db      62  WDOGFPILITKLIKIEDSDTYICEVEDQKEVQLLVFGITANSDFHLIQGSLTTLTLESP 121
Qy      147  PGSSSVQCRSPRGKNIQGGKTLVSQLELQDSGTWCTVLQONOKVEFKIDIIVLARQX 206
Db      122  PGSSSVQCRSPRGKNIQGGKTLVSQLELQDSGTWCTVLQONOKVEFKIDIIVLARQX 181
Qy      207  ASSIYKKEGEQVEFSPLAFTVEKLTGSGELMWQAEARASSKSWITFDLKNKEVSVRV 266

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Db      182  |ASSIYKKEGEQVEFSPLAFTVEKLTGSGELMWQAEARASSKSWITFDLKNKEVSVRV| 241
Qy      267  |TQDPKLGWKKLPHLTLTPQALPOYAGSGNLTALAEATGKHQEVNLVYWRATQLQKNL| 326
Db      242  |TQDPKLGWKKLPHLTLTPQALPOYAGSGNLTALAEATGKHQEVNLVYWRATQLQKNL| 301
Qy      327  TCEVWGPTSPKMLSLKLENKEAKVSKREKPVWVNLNPEAGWMOCLLSDSGVLLSNIKV 386
Db      302  TCEVWGPTSPKMLSLKLENKEAKVSKREKPVWVNLNPEAGWMOCLLSDSGVLLSNIKV 361
Qy      387  LPTWSTPVP 394
Db      362  LPTWSTPVP 369

RESULT 100
AA88327
ID      AAY88327 standard; protein; 369 AA.
XX
AC      AAY88327;
XX
DT      14-JUL-2000 (first entry)
XX
DE      T4 glycoprotein amino acid sequence.
XX
KM      sT4; glycoprotein; human immunodeficiency virus; HIV; block binding;
XX      AIDS; treatment; inhibit; cell to cell spread; infection; fusion.
XX      Mammalia.
XX      OS
XX      US5126433-A.
XX      PN
XX      30-JUN-1992.
XX      PD
XX      23-OCT-1987; 87US-00114244.
XX      PR
XX      21-AUG-1986; 86US-00898587.
XX      PA
XX      (UYCO ) UNIV COLUMBIA NEW YORK.
XX      PI
XX      Madden PJ, Chess L, Axel R, Weiss R, Littman DR, McDougal JS;
XX      WPI; 2000-348913/30.
XX      DR
XX      Soluble T4 glycoprotein useful for prevention and treatment of acquired
XX      immunodeficiency syndrome and for screening inhibitors of human
XX      immunodeficiency viral binding.
XX      PT
XX      Claim 1; Col 54; 64pp; English.
XX
CC      This sequence represents the amino acid sequence of glycosylated sT4
CC      glycoprotein. Human immunodeficiency virus (HIV) uses sT4 as a target
CC      receptor on T cells. The invention relates to glycosylated sT4 which
CC      functions by blocking the binding of HIV to T4 target cells, and can be
CC      used for the prophylaxis and treatment of AIDS patients. Administration
CC      of sT4 effectively inhibits the cell to cell spreading of HIV infection
CC      and also the fusion of HIV-infected T4 cells and non-infected T4 cells.
CC      The administration of T4 alleviates several symptoms associated with
CC      AIDS, and prevents the occurrence of new pathological changes. The sT4
CC      glycoprotein is useful for the prophylaxis and treatment of patients with
CC      AIDS. It is also useful as a reagent to identify natural, synthetic or
CC      recombinant molecules which act as therapeutic agents or inhibitors of
CC      T4+ cell interactions and in diagnostic assays for detection T4 proteins
CC      or molecules.
XX
SQ      Sequence 369 AA;

Query Match      55.4%; Score 1891; DB 3; Length 369;
Best Local Similarity 99.7%; Pred. No. 1.6e-95;
Matches 367; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      27  KVLGKGDVVELTCTASQKSIQFHWKNSNQIKILNGSFLTKGPKLNDRADSRSL 86

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: August 3, 2004, 13:14:00 ; Search time 54.8475 Seconds
(without alignments)
3706.029 Million cell updates/sec

Title: SEQ3
Perfect score: 3414
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Gapop 10.0 , Gapext 0.5

Searched: 1291235 seqs, 313682936 residues

Total number of hits satisfying chosen parameters: 1291235

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Listing first 125 summaries

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Prod. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

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2	2151	63.0	530	9	US-09-766-995-4
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4	2077	60.8	432	9	US-09-766-995-2
5	2039	59.7	532	10	US-09-939-537-6
6	2039	59.7	532	11	US-09-243-008-6
7	2039	59.7	575	10	US-09-939-537-4
8	2039	59.7	575	11	US-09-243-008-4
9	2035	59.6	462	10	US-09-939-537-5
10	2035	59.6	462	11	US-09-243-008-5
11	2030	59.5	457	11	US-09-891-119A-9
12	2029	59.4	398	10	US-09-939-537-29
13	2024	59.3	458	14	US-10-103-597A-39
14	2024	59.3	458	14	US-10-188-444-39
15	2024	59.3	458	14	US-10-207-655-170

16	2017	59.1	402	14	US-10-097-044A-1	Sequence 1, Appli
17	2016	59.1	458	12	US-10-151-274-3	Sequence 3, Appli
18	2006	58.8	458	8	US-08-681-219-27	Sequence 27, Appli
19	2006	58.8	458	11	US-09-220-111C-25	Sequence 25, Appli
20	2006	58.8	458	14	US-10-092-138-25	Sequence 25, Appli
21	2001	58.6	434	14	US-09-891-119A-2	Sequence 2, Appli
22	1904	55.8	434	14	US-10-097-044A-4	Sequence 4, Appli
23	1891	55.4	370	9	US-09-759-841-6	Sequence 6, Appli
24	1886.5	55.3	448	14	US-10-024-329-32	Sequence 32, Appli
25	1385	40.6	254	10	US-09-939-537-33	Sequence 33, Appli
26	1351.5	39.6	617	14	US-10-363-427-18	Sequence 18, Appli
27	1351.5	39.6	617	14	US-10-363-427-22	Sequence 22, Appli
28	1320	38.7	592	9	US-09-935-868-8	Sequence 8, Appli
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31	1319	38.6	543	14	US-10-207-655-345	Sequence 345, App
32	1316	38.5	492	14	US-10-207-655-344	Sequence 344, App
33	1313.5	38.5	437	14	US-10-363-427-14	Sequence 14, Appli
34	1313	38.5	504	14	US-10-207-655-348	Sequence 348, App
35	1312	38.4	594	9	US-09-815-108-22	Sequence 22, Appli
36	1312	38.4	594	14	US-10-229-584-32	Sequence 32, Appli
37	1311.5	38.4	567	12	US-09-773-877A-12	Sequence 12, Appli
38	1311.5	38.4	567	12	US-09-773-877A-20	Sequence 20, Appli
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89 1277 37.4 452 12 US-09-773-877A-16 Sequence 16, Appl
90 1277 37.4 704 14 US-10-357-653-2 Sequence 2, Appl
91 1276 37.4 476 16 US-10-660-128-12 Sequence 12, Appl
92 1275.5 37.4 387 12 US-10-050-237-4 Sequence 4, Appl
93 1275.5 37.4 453 14 US-10-159-006-18 Sequence 18, Appl
94 1275.5 37.4 475 9 US-09-740-002-25 Sequence 25, Appl
95 1275.5 37.4 475 16 US-10-325-698-25 Sequence 25, Appl
96 1275 37.3 471 15 US-10-108-260A-4285 Sequence 4285, Ap
97 1274.5 37.3 365 12 US-10-404-724-25 Sequence 9, Appl
98 1274 37.3 469 16 US-10-452-646-9 Sequence 20, Appl
99 1273.5 37.3 469 16 US-10-656-769-20 Sequence 10, Appl
100 1273.5 37.3 602 14 US-10-363-427-10 Sequence 4073, Ap
101 1273 37.3 473 15 US-10-108-260A-4278 Sequence 4278, Ap
102 1273 37.3 474 10 US-09-848-832-3 Sequence 3, Appl
103 1273 37.3 474 14 US-10-225-108A-3 Sequence 1, Appl
104 1273 37.3 474 15 US-10-461-148-1 Sequence 24, Appl
105 1273 37.3 502 14 US-10-363-427-24 Sequence 4, Appl
106 1273 37.3 448 16 US-10-467-546-4 Sequence 27, Appl
107 1272.5 37.3 475 9 US-09-740-002-27 Sequence 27, Appl
108 1272.5 37.3 475 16 US-10-325-698-27 Sequence 12, Appl
109 1272.5 37.2 442 12 US-10-226-435A-12 Sequence 117, App
110 1271.5 37.2 470 14 US-10-216-484-117 Sequence 143, App
111 1271.5 37.2 470 14 US-10-216-484-117 Sequence 117, App
112 1271.5 37.2 470 14 US-10-384-933-117 Sequence 143, App
113 1271.5 37.2 470 14 US-10-384-933-117 Sequence 143, App
114 1271.5 37.2 550 14 US-10-207-655-270 Sequence 15, Appl
115 1271.5 37.2 680 8 US-08-469-583A-15 Sequence 16, Appl
116 1271.5 37.2 404 9 US-09-948-018-16 Sequence 147, App
117 1271.5 37.2 470 14 US-10-216-484-147 Sequence 147, App
118 1270.5 37.2 470 14 US-10-384-933-147 Sequence 32, Appl
119 1270.5 37.2 541 16 US-10-471-151-32 Sequence 31, Appl
120 1270.5 37.2 558 16 US-10-471-151-31 Sequence 68, Appl
121 1270.5 37.2 451 10 US-09-925-179-68 Sequence 4, Appl
122 1270 37.2 451 15 US-10-423-289-4 Sequence 9, Appl
123 1270 37.2 470 14 US-10-020-786-9 Sequence 5, Appl
124 1270 37.2 470 14 US-10-227-694-5 Sequence 5, Appl
125 1270 37.2 470 14 US-10-227-694-5 Sequence 5, Appl

ALIGNMENTS

RESULT 1
US-08-485-163-5
; Sequence 5, Application US/08485163
; Publication No. US20020098191A1
; GENERAL INFORMATION:
; APPLICANT: Beaudry, Gary A.
; TITLE OF INVENTION: CD4-GAMMA2 CD4-19G2 CHIMERAS
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham LLP
; STREET: 1185 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.24
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/485,163
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28, 678
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 278-0400

TELEFAX: (212) 391-0525
; TELEEX:
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 530 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: cDNA
; ORIGINAL SOURCE:
; ORGANISM: homo sapien
; CELL TYPE: lymphocyte
; US-08-485-163-5

Query Match 63.0%; Score 2151; DB 8; Length 530;
Best Local Similarity 70.4%; Pred. No. 6,56-143;
Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

QY 1 MNRGVPFRHLLVLTQALPAPATGKRVLGKKDITVELCTTASQKKSIOFHMWNSNOIK 60
DB 1 MNRGVPFRHLLVLTQALPAPATGKRVLGKKDITVELCTTASQKKSIOFHMWNSNOIK 60
QY 61 ILNGQSFLLTKGPEKLNDRADSRSLMDQGNFPIIOLKI EDSDTYICEVEDQKEVQL 120
DB 61 ILNGQSFLLTKGPEKLNDRADSRSLMDQGNFPIIOLKI EDSDTYICEVEDQKEVQL 120
QY 121 LVFGLTNSDTHLLQSGSLTILTESPPGSSPSVQCRSPRGNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTNSDTHLLQSGSLTILTESPPGSSPSVQCRSPRGNIQGGKTLVSQLELDQSG 180
QY 181 TWITCTVLQNGKVEFKIDIVLAFQKASSIVYKKEGQVEFPFLATVTEKLTGSGELMW 240
DB 181 TWITCTVLQNGKVEFKIDIVLAFQKASSIVYKKEGQVEFPFLATVTEKLTGSGELMW 240
QY 241 QAEASSKSKWITFDLKNKEVSVKRYVQDPRKLDQNGKTLPHLITLPQALPOYAG---SGNL 297
DB 241 QAEASSKSKWITFDLKNKEVSVKRYVQDPRKLDQNGKTLPHLITLPQALPOYAG---SGNL 297
QY 298 TLAEAKTGKLGHEVNLVNRATQL-QKNLTCEVWGPTSPKMLSLKLENKAQVSKREK 356
DB 298 TLAEAKTGKLGHEVNLVNRATQL-QKNLTCEVWGPTSPKMLSLKLENKAQVSKREK 356
QY 357 PFWVLNPEAGMOCCLSDSGVLLIESNIKVLPTWSTVEPKSCDKHTTCCPPAPELLGG 416
DB 357 PFWVLNPEAGMOCCLSDSGVLLIESNIKVLPTWSTVEPKSCDKHTTCCPPAPELLGG 416
QY 293 P-----SNTKYDKT-----VERKCCVE---CPCCPAP-VAG 320
DB 293 P-----SNTKYDKT-----VERKCCVE---CPCCPAP-VAG 320
QY 417 PSVFLFPKKKQDTLMISRTPEVTCVVVDVSHEDPEVKFNNYVVDGVEVHNAKTKRREQYN 476
DB 417 PSVFLFPKKKQDTLMISRTPEVTCVVVDVSHEDPEVKFNNYVVDGVEVHNAKTKRREQYN 476
QY 321 PSVFLFPKKKQDTLMISRTPEVTCVVVDVSHEDPEVKFNNYVVDGVEVHNAKTKRREQYN 380
DB 321 PSVFLFPKKKQDTLMISRTPEVTCVVVDVSHEDPEVKFNNYVVDGVEVHNAKTKRREQYN 380
QY 477 STYRVSVLTVLHODMVGKKEGKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 536
DB 477 STYRVSVLTVLHODMVGKKEGKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 536
QY 381 STRPVSVLTVLHODMVGKKEGKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 440
DB 381 STRPVSVLTVLHODMVGKKEGKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 440
QY 537 LTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW 596
DB 537 LTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW 596
QY 441 MTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW 500
DB 441 MTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW 500
QY 597 QQGIVFSCSVMEALHNHYTQKSLSLSPG 625
DB 597 QQGIVFSCSVMEALHNHYTQKSLSLSPG 625
QY 501 QQGIVFSCSVMEALHNHYTQKSLSLSPG 529
DB 501 QQGIVFSCSVMEALHNHYTQKSLSLSPG 529

RESULT 2
US-09-766-995-4
; Sequence 4, Application US/09766995
; Patent No. US20020052481A1
; GENERAL INFORMATION:
; APPLICANT: Graham P. Allaway et al.
; TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED CD4-GAMMA2 AND CD4-19G2 IMMUNOCONJ
; FILE REFERENCE: 2048/41215-CB/JPW/SHS
; CURRENT APPLICATION NUMBER: US/09/766,995

/ CURRENT FILING DATE: 2001-01-22
 / NUMBER OF SEQ ID NOS: 9
 / SOFTWARE: PatentIn version 3.0
 / SEQ ID NO 4
 / LENGTH: 530
 / TYPE: PRT
 / ORGANISM: homo sapiens
 / US-09-766-995-4

Query Match 63.0%; Score 2151; DB 9; Length 530;
 Best Local Similarity 70.4%; Pred. No. 6,5e-143;
 Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

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Qy 1 MNRGVFRRLLLVLOALLPAATQGNKVVLGKGGDTVELTCTASQKKSIOFHMKNSNOIK 60
Db 1 MNRGVFRRLLLVLOALLPAATQGNKVVLGKGGDTVELTCTASQKKSIOFHMKNSNOIK 60
Qy 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIINKLBDSPTYICEVEDQKEEYVL 120
Db 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIINKLBDSPTYICEVEDQKEEYVL 120
Qy 121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPSVQCSPRGKNIQGGKTLVSQLELDQSG 180
Db 121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPSVQCSPRGKNIQGGKTLVSQLELDQSG 180
Qy 181 TWCTVLQNOQKVEFKIDIVLAFOKASSIYKKEGEQVESFPLAFVTEKLTGSGELMW 240
Db 181 TWCTVLQNOQKVEFKIDIVLAFOKASSIYKKEGEQVESFPLAFVTEKLTGSGELMW 240
Qy 241 QABRASSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPHLTLPOALPOYAG--SGNL 297
Db 241 QABRASSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPHLTLPOALPOYAG--SGNL 297
Qy 217 -----PCSRSTSESTALGLVNDYPEPVTVMNSGALTSVH 255
Db 217 -----PCSRSTSESTALGLVNDYPEPVTVMNSGALTSVH 255
Qy 298 TLALAKTGKLEHENVLVYMRATQL-QKNLTCEVWMPRTSPKMLSLKENKAYSKRXK 356
Db 298 TLALAKTGKLEHENVLVYMRATQL-QKNLTCEVWMPRTSPKMLSLKENKAYSKRXK 356
Qy 256 TEPAVLQSSGLYSLSVTVVPSSNFGOTYTCNV-----DHK 292
Db 256 TEPAVLQSSGLYSLSVTVVPSSNFGOTYTCNV-----DHK 292
Qy 357 PVMVNLPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEPKSCDTHTCPCPAPELG 416
Db 357 PVMVNLPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEPKSCDTHTCPCPAPELG 416
Qy 293 P-----SNTKYDKT---VERKCCVE---CPPCPAP-VAQ 320
Db 293 P-----SNTKYDKT---VERKCCVE---CPPCPAP-VAQ 320
Qy 417 PSVFLPPPKRDTLMTSRTPRYTCVVVDVSHEDPEVKFMWYVDGVEVNAKTKPREBOYN 476
Db 417 PSVFLPPPKRDTLMTSRTPRYTCVVVDVSHEDPEVKFMWYVDGVEVNAKTKPREBOYN 476
Qy 321 PSVFLPPPKRDTLMTSRTPRYTCVVVDVSHEDPEVKFMWYVDGVEVNAKTKPREBOYN 380
Db 321 PSVFLPPPKRDTLMTSRTPRYTCVVVDVSHEDPEVKFMWYVDGVEVNAKTKPREBOYN 380
Qy 477 STTRVSVTLVHODMLNGKEYKCKSNKALPAPLEKTSKAKGOREPOVYTLPPSRDE 536
Db 477 STTRVSVTLVHODMLNGKEYKCKSNKALPAPLEKTSKAKGOREPOVYTLPPSRDE 536
Qy 381 STTRVSVTLVHODMLNGKEYKCKSNKALPAPLEKTSKAKGOREPOVYTLPPSRDE 440
Db 381 STTRVSVTLVHODMLNGKEYKCKSNKALPAPLEKTSKAKGOREPOVYTLPPSRDE 440
Qy 537 LTKNOVSLTCLVGFYPSDIAVWESNGOPENNKTTPVLDSDGSFFLYSKLTVDKSRW 596
Db 537 LTKNOVSLTCLVGFYPSDIAVWESNGOPENNKTTPVLDSDGSFFLYSKLTVDKSRW 596
Qy 441 MTKNOVSLTCLVGFYPSDIAVWESNGOPENNKTTPVLDSDGSFFLYSKLTVDKSRW 500
Db 441 MTKNOVSLTCLVGFYPSDIAVWESNGOPENNKTTPVLDSDGSFFLYSKLTVDKSRW 500
Qy 597 QCGNVFSCSVMEALHNHYTQKSLSPG 625
Db 597 QCGNVFSCSVMEALHNHYTQKSLSPG 625
Qy 501 QCGNVFSCSVMEALHNHYTQKSLSPG 529
Db 501 QCGNVFSCSVMEALHNHYTQKSLSPG 529

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RESULT 3
 US-08-485-163-3 Application US/08485163
 / Sequence 3, Publication No. US20020098191A1
 / Publication No. US20020098191A1
 / GENERAL INFORMATION:
 / APPLICANT: Beaudry, Gary A.
 / APPLICANT: Magdon, Paul J.
 / TITLE OF INVENTION: CD4-GAMMA2 CD4-IGG2 CHIMERAS
 / NUMBER OF SEQUENCES: 10
 / CORRESPONDENCE ADDRESS:
 / ADDRESSER: Cooper & Dunham LLP
 / STREET: 1185 Avenue of the Americas
 / CITY: New York
 / STATE: New York
 / COUNTRY: USA

```

/ ZIP: 10036
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.24
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/485,163
/ FILING DATE: 07-JUN-1995
/ CLASSIFICATION: 514
/ ATTORNEY/AGENT INFORMATION:
/ NAME: White, John P.
/ REGISTRATION NUMBER: 28,678
/ REFERENCE/DOCKET NUMBER: 37690-II-1-PCT-US
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (212) 278-0400
/ TELEFAX: (212) 391-0525
/ TELEX:
/ INFORMATION FOR SEQ ID NO: 3:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 432 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: unknown
/ TOPOLOGY: unknown
/ MOLECULE TYPE: protein
/ ORIGINAL SOURCE:
/ ORGANISM: homo sapien
/ CELL TYPE: lymphocyte
/ US-08-485-163-3

Query Match 60.8%; Score 2077; DB 8; Length 432;
Best Local Similarity 66.1%; Pred. No. 8e-138;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

Qy 1 MNRGVFRRLLLVLOALLPAATQGNKVVLGKGGDTVELTCTASQKKSIOFHMKNSNOIK 60
Db 1 MNRGVFRRLLLVLOALLPAATQGNKVVLGKGGDTVELTCTASQKKSIOFHMKNSNOIK 60
Qy 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIINKLBDSPTYICEVEDQKEEYVL 120
Db 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIINKLBDSPTYICEVEDQKEEYVL 120
Qy 121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPSVQCSPRGKNIQGGKTLVSQLELDQSG 180
Db 121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPSVQCSPRGKNIQGGKTLVSQLELDQSG 180
Qy 181 TWCTVLQNOQKVEFKIDIVLAFOKASSIYKKEGEQVESFPLAFVTEKLTGSGELMW 240
Db 181 TWCTVLQNOQKVEFKIDIVLAFOKASSIYKKEGEQVESFPLAFVTEKLTGSGELMW 240
Qy 241 QABRASSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPHLTLPOALPOYAGSGNLTLA 300
Db 241 QABRASSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPHLTLPOALPOYAGSGNLTLA 300
Qy 207 -----KCCVE---CPPCPAP-VAQ 226
Db 207 -----KCCVE---CPPCPAP-VAQ 226
Qy 361 INPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEPKSCDTHTCPCPAPELGSPVF 420
Db 361 INPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEPKSCDTHTCPCPAPELGSPVF 420
Qy 421 LPPPKRDTLMTSRTPRYTCVVVDVSHEDPEVKFMWYVDGVEVNAKTKPREBOYNSTR 480
Db 421 LPPPKRDTLMTSRTPRYTCVVVDVSHEDPEVKFMWYVDGVEVNAKTKPREBOYNSTR 480
Qy 227 LPPPKRDTLMTSRTPRYTCVVVDVSHEDPEVKFMWYVDGVEVNAKTKPREBOYNSTR 286
Db 227 LPPPKRDTLMTSRTPRYTCVVVDVSHEDPEVKFMWYVDGVEVNAKTKPREBOYNSTR 286
Qy 481 VSVTLVHODMLNGKEYKCKSNKALPAPLEKTSKAKGOREPOVYTLPPSRDEMTKN 540
Db 481 VSVTLVHODMLNGKEYKCKSNKALPAPLEKTSKAKGOREPOVYTLPPSRDEMTKN 540
Qy 287 VSVTLVHODMLNGKEYKCKSNKALPAPLEKTSKAKGOREPOVYTLPPSRDEMTKN 346
Db 287 VSVTLVHODMLNGKEYKCKSNKALPAPLEKTSKAKGOREPOVYTLPPSRDEMTKN 346
Qy 541 QVSLTCLVGFYPSDIAVWESNGOPENNKTTPVLDSDGSFFLYSKLTVDKSRMOQN 600
Db 541 QVSLTCLVGFYPSDIAVWESNGOPENNKTTPVLDSDGSFFLYSKLTVDKSRMOQN 600
Qy 347 QVSLTCLVGFYPSDIAVWESNGOPENNKTTPVLDSDGSFFLYSKLTVDKSRMOQN 406
Db 347 QVSLTCLVGFYPSDIAVWESNGOPENNKTTPVLDSDGSFFLYSKLTVDKSRMOQN 406

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QY 601 VFSCVMBEALHNHYTOKSLSPG 625
DB 407 VFSCVMBEALHNHYTOKSLSPG 431

RESULT 4

US-09-766-995-2
; Sequence 2, Application US/09766995
; Patent No. US20020052481A1
; GENERAL INFORMATION:
; APPLICANT: Graham P. Allaway et al.
; TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED CD4-GAMMA2 AND CD4-IGG2 IMMUNOCONJUGATES
; FILE REFERENCE: 2048/41215-CB/JPM/SHS
; CURRENT APPLICATION NUMBER: US/09/766,995
; CURRENT FILING DATE: 2001-01-22
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 2
; LENGTH: 432
; TYPE: PRT
; ORGANISM: homo sapiens
US-09-766-995-2

Query Match 60.8%; Score 2077; DB 9; Length 432;
Best Local Similarity 66.1%; Pred. No. 8e-138;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

QY 1 MNRGVPFRHLILVLOLALPPAATGKNRVLGKGGDTVELTCTASQKSIQFHWKNSNOIK 60
DB 1 MNRGVPFRHLILVLOLALPPAATGKNRVLGKGGDTVELTCTASQKSIQFHWKNSNOIK 60
QY 61 ILNGQSFLLTKGSPKLANDRADSRSLMDQGNFLLIKNLKIBSDTYICEVEDQKEEVOL 120
DB 61 ILNGQSFLLTKGSPKLANDRADSRSLMDQGNFLLIKNLKIBSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSPTHLQGGSLTTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSPTHLQGGSLTTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIYKKKEGOVERSPFLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLONOKKVEFKIDIVLAFER----- 206
QY 241 QAERASSKSWITPDLKQKKEVSKKVTDPKLQWKKLPIHLTLRQALPOYAGSGNLTLA 300
DB 207 ----- 206
QY 301 LEAKTGKLEHVNVLVMBRATOLQKNLTCEVWGPTSPKMLSLKLENKAKVSKREKPVWV 360
DB 207 ----- 206
QY 361 LNPEAGMOCCLSDSGOVLBSNIVLPTWSTPVEPKSCDKTHTTTPCPAPPELLAGPSVF 420
DB 207 -----KCCV-----CPGPCPAPR-VAGPSVF 226
QY 421 LPPPKPDKTMTLSRTPEVTCVVVDVSHEDPEVKFMWYDGVENHAKKRPREEQVNSYR 480
DB 227 LPPPKPDKTMTLSRTPEVTCVVVDVSHEDPEVKFMWYDGVENHAKKRPREEQVNSYR 286
QY 481 VVSVLTVLHODVLNKEKYEKCKVSNKALPAPLEKTIISKAKGQPREPOVYTTLPSSRDELTKN 540
DB 287 VVSVLTVLHODVLNKEKYEKCKVSNKALPAPLEKTIISKAKGQPREPOVYTTLPSSRDELTKN 346
QY 541 QVSLTCLVKGFPSPDIANVWBSNNGOPENNYYKTPPVLDSDGSFLLYSKLTVDKSRWQGN 600
DB 347 QVSLTCLVKGFPSPDIANVWBSNNGOPENNYYKTPPVLDSDGSFLLYSKLTVDKSRWQGN 406
QY 601 VFSCVMBEALHNHYTOKSLSPG 625
DB 407 VFSCVMBEALHNHYTOKSLSPG 431

RESULT 5

US-09-939-537-6
; Sequence 6, Application US/09939537
; Publication No. US20030138410A1

GENERAL INFORMATION:

APPLICANT: Seed, Brian

Banapour, Babak

Romeo, Charles

Kolanus, Waldemar

TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED CELLS BY CHIMERIC CD4 RECEPTOR-BEARING CELLS

NUMBER OF SEQUENCES: 53

CORRESPONDENCE ADDRESS:

ADDRESSEE: Clark & Elbing LLP

STREET: 176 Federal Street

CITY: Boston

STATE: MA

COUNTRY: USA

ZIP: 02110

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: DOS

SOFTWARE: FastSeq for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/939,537

FILING DATE: 24-Aug-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/284,391

FILING DATE: 02-AUG-1994

APPLICATION NUMBER: 08/195,395

FILING DATE: 14-FEB-1994

APPLICATION NUMBER: 07/847,566

FILING DATE: 06-MAR-1992

APPLICATION NUMBER: 07/665,961

FILING DATE: 07-MAR-1991

ATTORNEY/AGENT INFORMATION:

NAME: Elbing, Karen L.

REGISTRATION NUMBER: 35,238

REFERENCE/DOCKET NUMBER: 00786/247001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 617-428-0200

TELEFAX: 617-428-7045

TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 6:

SEQUENCE CHARACTERISTICS:

LENGTH: 532 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 6:

US-09-939-537-6

Query Match 59.7%; Score 2039; DB 10; Length 532;

Best Local Similarity 99.0%; Pred. No. 5e-135;

Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLILVLOLALPPAATGKNRVLGKGGDTVELTCTASQKSIQFHWKNSNOIK 60
DB 1 MNRGVPFRHLILVLOLALPPAATGKNRVLGKGGDTVELTCTASQKSIQFHWKNSNOIK 60
QY 61 ILNGQSFLLTKGSPKLANDRADSRSLMDQGNFLLIKNLKIBSDTYICEVEDQKEEVOL 120
DB 61 ILNGQSFLLTKGSPKLANDRADSRSLMDQGNFLLIKNLKIBSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSPTHLQGGSLTTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSPTHLQGGSLTTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIYKKKEGOVERSPFLAFTVEKLTGSGELMW 240

|||||
Db 181 TWTCTVLQKQKVEFIDIVLAFQKASSIYVKKEGEQVEFSPPLAFVTEKLTGSGELMW 240
Qy 241 QAEBSASSKSWITFDLKNKEVSVKRVTDOPKLOMGKULPLHLTLPQALPOYAGSGLTLTA 300
Db 241 QAEBSASSKSWITFDLKNKEVSVKRVTDOPKLOMGKULPLHLTLPQALPOYAGSGLTLTA 300
Qy 301 LEAKTGKLGHOEYNLVVWRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWV 360
Db 301 LEAKTGKLGHOEYNLVVWRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWV 360
Qy 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
Db 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401

RESULT 6
US-09-243-008-6
; Sequence 6, Application US/09243008
; Publication No. US20040005334A1
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian et al.
; TITLE OF INVENTION: Redirection of Cellular Immunity by Receptor Chimeras
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; COMPUTER: IBM PS/2 Model 502 or 55SX
; OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
; SOFTWARE: Wordperfect (Version 5.0)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/243,008
; FILING DATE: 02-Feb-1999
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/394,176
; FILING DATE: SEPTEMBER 11, 1995
; APPLICATION NUMBER: 08/203,866
; FILING DATE: February 28, 1994
; APPLICATION NUMBER: 07/847,566
; FILING DATE: March 6, 1992
; APPLICATION NUMBER: 07/665,961
; FILING DATE: March 7, 1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Karen F. Lech, Ph.D
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/270001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 542-5070
; TELEFAX: (617) 542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 532 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 6:
US-09-243-008-6

Query Match 59.7%; Score 2039; DB 11; Length 532;
Best Local Similarity 99.0%; Pred. No. 5e-135; 1; Indels 2; Gaps 1;
Matches 397; Conservative 1; Mismatches 1;

Qy 1 MNRGVPFRLLLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHKNKSNQIK 60
Db 1 MNRGVPFRLLLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHKNKSNQIK 60

Qy 61 ILNGSFLTKGPSKLANDRADSRRLMPQGNFPLIIKLTIEDSDTYICEVEDQKEEYQL 120
Db 61 ILNGSFLTKGPSKLANDRADSRRLMPQGNFPLIIKLTIEDSDTYICEVEDQKEEYQL 120
Qy 121 LVFGLTANSDFHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Db 121 LVFGLTANSDFHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Qy 181 TWTCTVLQKQKVEFKIDIVLAFQKASSIYVKKEGEQVEFSPPLAFVTEKLTGSGELMW 240
Db 181 TWTCTVLQKQKVEFKIDIVLAFQKASSIYVKKEGEQVEFSPPLAFVTEKLTGSGELMW 240
Qy 241 QAEBSASSKSWITFDLKNKEVSVKRVTDOPKLOMGKULPLHLTLPQALPOYAGSGLTLTA 300
Db 241 QAEBSASSKSWITFDLKNKEVSVKRVTDOPKLOMGKULPLHLTLPQALPOYAGSGLTLTA 300
Qy 301 LEAKTGKLGHOEYNLVVWRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWV 360
Db 301 LEAKTGKLGHOEYNLVVWRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWV 360
Qy 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
Db 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401

RESULT 7
US-09-939-537-4
; Sequence 4, Application US/09939537
; Publication No. US20030138410A1
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; Banapour, Babak
; Romeo, Charles
; Kolanue, Waldemar
; TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED CELLS BY CHIMERIC CD4 RECEPTOR- BEARING CELLS
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: Pasteo for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/939,537
; FILING DATE: 24-Aug-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/284,391
; FILING DATE: 02-AUG-1994
; APPLICATION NUMBER: 08/195,395
; FILING DATE: 14-FEB-1994
; APPLICATION NUMBER: 07/847,566
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/665,961
; FILING DATE: 07-MAR-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Elbing, Karen L
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/247001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
; TELEX: <Unknown>
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:

LENGTH: 575 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 SEQUENCE DESCRIPTION: SEQ ID NO: 4:
 US-09-939-537-4

Query Match 59.7%; Score 2039; DB 10; Length 575;
 Best Local Similarity 99.0%; Pred. No. 5.5e-135;
 Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

OY 1 MNRGVPFRHLLVLTQALLPAATQGNKRVLGKGDVTELTCTASQKSIQFHMKNNSQIK 60
 DB 1 MNRGVPFRHLLVLTQALLPAATQGNKRVLGKGDVTELTCTASQKSIQFHMKNNSQIK 60
 OY 61 ILNGSGFLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120
 DB 61 ILNGSGFLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120
 OY 121 LVFGLTANSDTHLLOQGSFLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSDTHLLOQGSFLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 OY 181 TWCTVLTQNKKEVEFKIDIVLAFOKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 240
 DB 181 TWCTVLTQNKKEVEFKIDIVLAFOKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 240
 OY 241 QAERASSKSWITPDLKNKEVSVKRVTDPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
 DB 241 QAERASSKSWITPDLKNKEVSVKRVTDPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
 OY 301 LEAKTGKLGHOEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKYSKKEKPYMV 360
 DB 301 LEAKTGKLGHOEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKYSKKEKPYMV 360
 OY 361 LNPEAGMWQCLSDSGQVLESNIKVLPWTWSTPV--EPKSC 399
 DB 361 LNPEAGMWQCLSDSGQVLESNIKVLPWTWSTPVHADPKLC 401

RESULT 8
 US-09-243-008-4
 Sequence 4, Application US/09243008
 Publication No. US2004000534A1
 GENERAL INFORMATION:
 APPLICANT: Seed, Brian et al.
 TITLE OF INVENTION: Redirection of Cellular Immunity by
 Receptor Chimeras
 NUMBER OF SEQUENCES: 40
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Fish & Richardson P.C.
 STREET: 225 Franklin Street
 CITY: Boston
 STATE: MA
 COUNTRY: USA
 ZIP: 02110-2804
 COMPUTER READABLE FORM:
 MEDIUM TYPE: 3.5" Diskette, 1.44 MB
 COMPUTER: IBM PS/2 Model 50Z or 555X
 OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
 SOFTWARE: Wordperfect (Version 5.0)
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/243,008
 FILING DATE: 02-Feb-1999
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US/08/394,176
 FILING DATE: SEPTEMBER 11, 1995
 APPLICATION NUMBER: 08/203,866
 FILING DATE: February 28, 1994
 APPLICATION NUMBER: 07/847,566
 FILING DATE: March 6, 1992
 APPLICATION NUMBER: 07/665,961

FILING DATE: March 7, 1991
 ATTORNEY/AGENT INFORMATION:
 NAME: Karen F. Leach, Ph.D.
 REGISTRATION NUMBER: 35,238
 REFERENCE/DOCKET NUMBER: 00786/270001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (617) 542-5070
 TELEFAX: (617) 542-8906
 TELEX: 200154
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 575 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 SEQUENCE DESCRIPTION: SEQ ID NO: 4:
 US-09-243-008-4

Query Match 59.7%; Score 2039; DB 11; Length 575;
 Best Local Similarity 99.0%; Pred. No. 5.5e-135;
 Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

OY 1 MNRGVPFRHLLVLTQALLPAATQGNKRVLGKGDVTELTCTASQKSIQFHMKNNSQIK 60
 DB 1 MNRGVPFRHLLVLTQALLPAATQGNKRVLGKGDVTELTCTASQKSIQFHMKNNSQIK 60
 OY 61 ILNGSGFLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120
 DB 61 ILNGSGFLTKGPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120
 OY 121 LVFGLTANSDTHLLOQGSFLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSDTHLLOQGSFLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 OY 181 TWCTVLTQNKKEVEFKIDIVLAFOKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 240
 DB 181 TWCTVLTQNKKEVEFKIDIVLAFOKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 240
 OY 241 QAERASSKSWITPDLKNKEVSVKRVTDPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
 DB 241 QAERASSKSWITPDLKNKEVSVKRVTDPKLQMGKPLPHLTLPQALPOYAGSGNLTIA 300
 OY 301 LEAKTGKLGHOEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKYSKKEKPYMV 360
 DB 301 LEAKTGKLGHOEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKLENKEAKYSKKEKPYMV 360
 OY 361 LNPEAGMWQCLSDSGQVLESNIKVLPWTWSTPV--EPKSC 399
 DB 361 LNPEAGMWQCLSDSGQVLESNIKVLPWTWSTPVHADPKLC 401

RESULT 9
 US-09-939-537-5
 Sequence 5, Application US/09939537
 Publication No. US20030138410A1
 GENERAL INFORMATION:
 APPLICANT: Seed, Brian
 TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
 CELLS BY CHIMERIC CD4 RECEPTOR-BEARING CELLS
 NUMBER OF SEQUENCES: 53
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Clark & Elbing LLP
 STREET: 176 Federal Street
 CITY: Boston
 STATE: MA
 COUNTRY: USA
 ZIP: 02110
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Diskette
 COMPUTER: IBM Compatible


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/ OPERATING SYSTEM: DOS
/ SOFTWARE: FastSeq for Windows Version 2.0
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/939,537
/ FILING DATE: 24-Aug-2001
/ CLASSIFICATION: <Unknown>
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 08/284,391
/ FILING DATE: 02-AUG-1994
/ APPLICATION NUMBER: 08/195,395
/ FILING DATE: 14-FEB-1994
/ APPLICATION NUMBER: 07/847,566
/ FILING DATE: 06-MAR-1992
/ APPLICATION NUMBER: 07/665,961
/ FILING DATE: 07-MAR-1991
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Elding, Karen L.
/ REGISTRATION NUMBER: 35,238
/ REFERENCE/DOCKET NUMBER: 00786/247001
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 617-428-0200
/ TELEFAX: 617-428-7045
/ TELEX: <Unknown>
/ INFORMATION FOR SEQ ID NO: 5:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 462 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-09-939-537-5

Query Match      59.6%; Score 2035; DB 10; Length 462;
Best Local Similarity 98.8%; Pred. No. 7.9e-135;
Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

1  MNRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
Db 1  MNRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
QY 61  ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIIKNKIEDSDTYICEVEDQKEEYOL 120
Db 61  ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIIKNKIEDSDTYICEVEDQKEEYOL 120
QY 121  LVFGLTANSDTHLQOGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Db 121  LVFGLTANSDTHLQOGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181  TWTCTVLONOKKVEPKIDIVILAFOKASSIYKKKEGOVEFSPLAFTVEKLTSGGELMW 240
Db 181  TWTCTVLONOKKVEPKIDIVILAFOKASSIYKKKEGOVEFSPLAFTVEKLTSGGELMW 240
QY 241  QAERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 300
Db 241  QAERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 300
QY 301  LEAKTGKLEHGVNVLVVMRAITOLQKNLTCEVWGPTSPKMLSLKENKAQVSKREKPVWV 360
Db 301  LEAKTGKLEHGVNVLVVMRAITOLQKNLTCEVWGPTSPKMLSLKENKAQVSKREKPVWV 360
QY 361  LNPEAGMWOCLLSDSGOVLLESNIKVLPTWSTPVHADPOLC 401
Db 361  LNPEAGMWOCLLSDSGOVLLESNIKVLPTWSTPVHADPOLC 401

RESULT 10
US-09-243-008-5
/ Sequence 5, Application US/09243008
/ Publication No. US20040005334A1
/ GENERAL INFORMATION:
/ APPLICANT: Seed, Brian et al.
/ TITLE OF INVENTION: Redirection of Cellular Immunity by
```

```
/ Receptor Chimeras
/ NUMBER OF SEQUENCES: 40
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Fish & Richardson P.C.
/ STREET: 225 Franklin Street
/ CITY: Boston
/ STATE: MA
/ COUNTRY: USA
/ ZIP: 02110-2804
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: 3.5" Diskette, 1.44 MB
/ COMPUTER: IBM PS/2 Model 502 or 55SX
/ OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
/ SOFTWARE: Wordperfect (Version 5.0)
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/243,008
/ FILING DATE: 02-Feb-1999
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US/08/394,176
/ FILING DATE: SEPTEMBER 11, 1995
/ APPLICATION NUMBER: 08/203,866
/ FILING DATE: February 28, 1994
/ APPLICATION NUMBER: 07/847,566
/ FILING DATE: March 6, 1992
/ APPLICATION NUMBER: 07/665,961
/ FILING DATE: March 7, 1991
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Karen F. Lech, Ph.D.
/ REGISTRATION NUMBER: 35,238
/ REFERENCE/DOCKET NUMBER: 00786/270001
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (617) 542-5070
/ TELEFAX: (617) 542-8906
/ TELEX: 200154
/ INFORMATION FOR SEQ ID NO: 5:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 462 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-09-243-008-5

Query Match      59.6%; Score 2035; DB 11; Length 462;
Best Local Similarity 98.8%; Pred. No. 7.9e-135;
Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

1  MNRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
Db 1  MNRGVPFRHLVLVQLALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNNOIK 60
QY 61  ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIIKNKIEDSDTYICEVEDQKEEYOL 120
Db 61  ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIIKNKIEDSDTYICEVEDQKEEYOL 120
QY 121  LVFGLTANSDTHLQOGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Db 121  LVFGLTANSDTHLQOGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181  TWTCTVLONOKKVEPKIDIVILAFOKASSIYKKKEGOVEFSPLAFTVEKLTSGGELMW 240
Db 181  TWTCTVLONOKKVEPKIDIVILAFOKASSIYKKKEGOVEFSPLAFTVEKLTSGGELMW 240
QY 241  QAERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 300
Db 241  QAERASSSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 300
QY 301  LEAKTGKLEHGVNVLVVMRAITOLQKNLTCEVWGPTSPKMLSLKENKAQVSKREKPVWV 360
Db 301  LEAKTGKLEHGVNVLVVMRAITOLQKNLTCEVWGPTSPKMLSLKENKAQVSKREKPVWV 360
QY 361  LNPEAGMWOCLLSDSGOVLLESNIKVLPTWSTPVHADPOLC 401
Db 361  LNPEAGMWOCLLSDSGOVLLESNIKVLPTWSTPVHADPOLC 401
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Db 361 LNPEAGMWQCLSDSGVLLSESNIKVLPWTWSTPVHADPOLC 401

RESULT 11

US-09-891-119A-9

Sequence 9, Application US/09891119A

Publication No. US20040013683A1

GENERAL INFORMATION:

APPLICANT: Maddon, Paul J.

TITLE OF INVENTION: DERIVATIVES OF SOLUBLE T-4

FILE REFERENCE: 24577-CY-8

CURRENT APPLICATION NUMBER: US/09/891,119A

CURRENT FILING DATE: 2001-06-25

NUMBER OF SEQ ID NOS: 22

SOFTWARE: PatentIn version 3.1

SEQ ID NO 9

LENGTH: 457

TYPE: PRT

ORGANISM: human

US-09-891-119A-9

Query Match 59.5%; Score 2030; DB 11; Length 457;

Best Local Similarity 99.5%; Pred. No. 1.7e-134;

Matches 394; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 MNRGVPRHLLVLTQALLPAATQGNKVLGKGGDTVELTCTASQKKSIOFHMKNSNOIK 60

Db 1 MNRGVPRHLLVLTQALLPAATQGNKVLGKGGDTVELTCTASQKKSIOFHMKNSNOIK 60

QY 61 ILNGSGFLTKGSPKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120

Db 61 ILNGSGFLTKGSPKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120

QY 121 LVFGLTANSDTHLLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

Db 121 LVFGLTANSDTHLLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

QY 181 TWCTVLOQNKKEFKIDIVLAFQKASSIVYKKEGQVESFPPLAFTVEKLTSGSELWM 240

Db 181 TWCTVLOQNKKEFKIDIVLAFQKASSIVYKKEGQVESFPPLAFTVEKLTSGSELWM 240

QY 241 QAEKSSSSKSWITFDLKNKEVSVKRVTPDPKLGKGLPLHLTLPQALPOYAGSGNLTIA 300

Db 241 QAEKSSSSKSWITFDLKNKEVSVKRVTPDPKLGKGLPLHLTLPQALPOYAGSGNLTIA 300

QY 301 LEAKTGKLEHVEVNLVVMRATOLQKVLTCBVWGPTSPKLMLSKLENKEAKVSKKEKPVW 360

Db 301 LEAKTGKLEHVEVNLVVMRATOLQKVLTCBVWGPTSPKLMLSKLENKEAKVSKKEKPVW 360

QY 361 LNPEAGMWQCLSDSGVLLSESNIKVLPWTWSTPV 396

Db 361 LNPEAGMWQCLSDSGVLLSESNIKVLPWTWSTPV 396

RESULT 12

US-09-939-537-29

Sequence 29, Application US/09939537

Publication No. US20030138410A1

GENERAL INFORMATION:

APPLICANT: Seed, Brian

Banapour, Babak

Romeo, Charles

Kolanius, Waldemar

TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED

CELLS BY CHIMERIC CD4 RECEPTOR- BEARING CELLS

NUMBER OF SEQUENCES: 53

CORRESPONDENCE ADDRESS:

ADDRESS: Clark & Elbing LLP

STREET: 176 Federal Street

CITY: Boston

STATE: MA

COUNTRY: USA

ZIP: 02110

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: DOS

SOFTWARE: PasteSeq for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/939,537

FILING DATE: 24-Aug-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/284,391

FILING DATE: 02-AUG-1994

APPLICATION NUMBER: 08/195,395

FILING DATE: 14-FEB-1994

APPLICATION NUMBER: 07/847,566

FILING DATE: 06-MAR-1992

APPLICATION NUMBER: 07/665,961

FILING DATE: 07-MAR-1991

ATTORNEY/AGENT INFORMATION:

NAME: Elbing, Karen L

REGISTRATION NUMBER: 35,238

REFERENCE/DOCKET NUMBER: 00786/247001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 617-428-0200

TELEFAX: 617-428-7045

TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 29:

SEQUENCE CHARACTERISTICS:

LENGTH: 398 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 29:

US-09-939-537-29

Query Match 59.4%; Score 2029; DB 10; Length 398;

Best Local Similarity 100.0%; Pred. No. 1.7e-134;

Matches 394; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MNRGVPRHLLVLTQALLPAATQGNKVLGKGGDTVELTCTASQKKSIOFHMKNSNOIK 60

Db 1 MNRGVPRHLLVLTQALLPAATQGNKVLGKGGDTVELTCTASQKKSIOFHMKNSNOIK 60

QY 61 ILNGSGFLTKGSPKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120

Db 61 ILNGSGFLTKGSPKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120

QY 121 LVFGLTANSDTHLLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

Db 121 LVFGLTANSDTHLLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

QY 181 TWCTVLOQNKKEFKIDIVLAFQKASSIVYKKEGQVESFPPLAFTVEKLTSGSELWM 240

Db 181 TWCTVLOQNKKEFKIDIVLAFQKASSIVYKKEGQVESFPPLAFTVEKLTSGSELWM 240

QY 241 QAEKSSSSKSWITFDLKNKEVSVKRVTPDPKLGKGLPLHLTLPQALPOYAGSGNLTIA 300

Db 241 QAEKSSSSKSWITFDLKNKEVSVKRVTPDPKLGKGLPLHLTLPQALPOYAGSGNLTIA 300

QY 301 LEAKTGKLEHVEVNLVVMRATOLQKVLTCBVWGPTSPKLMLSKLENKEAKVSKKEKPVW 360

Db 301 LEAKTGKLEHVEVNLVVMRATOLQKVLTCBVWGPTSPKLMLSKLENKEAKVSKKEKPVW 360

QY 361 LNPEAGMWQCLSDSGVLLSESNIKVLPWTWSTPV 394

Db 361 LNPEAGMWQCLSDSGVLLSESNIKVLPWTWSTPV 394

RESULT 13

US-10-103-597A-39

Sequence 39, Application US/10103597A

Publication No. US20030096432A1

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/ GENERAL INFORMATION:
/ APPLICANT: Jakobsen, Bent Karsten
/ TITLE OF INVENTION: Screening Methods
/ FILE REFERENCE: 102286.142
/ CURRENT APPLICATION NUMBER: US/10/103,597A
/ CURRENT FILING DATE: 2002-10-17
/ PRIOR APPLICATION NUMBER: PCT/GB00/03579
/ PRIOR FILING DATE: 2000-09-18
/ PRIOR APPLICATION NUMBER: GB 9922352.1
/ PRIOR FILING DATE: 1999-09-21
/ NUMBER OF SEQ ID NOS: 39
/ SOFTWARE: FaastSeq for Windows Version 4.0
/ SEQ ID NO 39
/ LENGTH: 458
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-10-103-597A-39

Query Match          59.3%; Score 2024; DB 14; Length 458;
Best Local Similarity 99.2%; Pred. No. 4.6e-134;
Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 NMRGVPFRHLVLVQLALLPAATQGNKVVLGKKGTVELTCTASQKKSIOFHWKNSNOIK 60
DB 1 NMRGVPFRHLVLVQLALLPAATQGNKVVLGKKGTVELTCTASQKKSIOFHWKNSNOIK 60
QY 61 ILGNQGSFLTGGPSKLNDRADSRSLMDQGNPPLIIKULKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILGNQGSFLTGGPSKLNDRADSRSLMDQGNPPLIIKULKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDBTHLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDBTHLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 122 LVFGLTANSDBTHLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 122 LVFGLTANSDBTHLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFVTEKLTGSGELMW 240
QY 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFVTEKLTGSGELMW 240
QY 241 QAEKASSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
DB 241 QAEKASSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
QY 241 QAEKASSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
DB 241 QAEKASSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
QY 301 LEAKTGKLEHVEVNLVVMRATQLOKNTLCEVWGPTSPKMLSLKLENKEAKVSKREKPYVW 360
DB 301 LEAKTGKLEHVEVNLVVMRATQLOKNTLCEVWGPTSPKMLSLKLENKEAKVSKREKPYVW 360
QY 301 LEAKTGKLEHVEVNLVVMRATQLOKNTLCEVWGPTSPKMLSLKLENKEAKVSKREKPYVW 360
DB 301 LEAKTGKLEHVEVNLVVMRATQLOKNTLCEVWGPTSPKMLSLKLENKEAKVSKREKPYVW 360
QY 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPVEP 396
DB 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPVEP 396

RESULT 14
US-10-188-444-39
/ Sequence 39, Application US/10188444
/ Publication No. US20030104635A1
/ GENERAL INFORMATION:
/ APPLICANT: Jakobsen, Bent Karsten
/ TITLE OF INVENTION: Screening Methods
/ FILE REFERENCE: 102286.142 (CIP)
/ CURRENT APPLICATION NUMBER: US/10/188,444
/ CURRENT FILING DATE: 2002-07-02
/ PRIOR APPLICATION NUMBER: PCT/GB00/03579
/ PRIOR FILING DATE: 2000-09-18
/ PRIOR APPLICATION NUMBER: GB 9922352.1
/ PRIOR FILING DATE: 1999-09-21
/ NUMBER OF SEQ ID NOS: 39
/ SOFTWARE: FaastSeq for Windows Version 4.0
/ SEQ ID NO 39
/ LENGTH: 458
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-10-188-444-39
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Query Match          59.3%; Score 2024; DB 14; Length 458;
Best Local Similarity 99.2%; Pred. No. 4.6e-134;
Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 NMRGVPFRHLVLVQLALLPAATQGNKVVLGKKGTVELTCTASQKKSIOFHWKNSNOIK 60
DB 1 NMRGVPFRHLVLVQLALLPAATQGNKVVLGKKGTVELTCTASQKKSIOFHWKNSNOIK 60
QY 61 ILGNQGSFLTGGPSKLNDRADSRSLMDQGNPPLIIKULKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILGNQGSFLTGGPSKLNDRADSRSLMDQGNPPLIIKULKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDBTHLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDBTHLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 121 LVFGLTANSDBTHLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDBTHLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFVTEKLTGSGELMW 240
QY 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFVTEKLTGSGELMW 240
QY 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPVEP 396
DB 361 LNPEAGMOCCLSDSGQVLLSNIKVLPTWSTPVEP 396

RESULT 15
US-10-207-655-170
/ Sequence 170, Application US/10207655
/ Publication No. US20030118592A1
/ GENERAL INFORMATION:
/ APPLICANT: Ledbetter, Jeffrey A.
/ TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
/ FILE REFERENCE: 390069.401C1
/ CURRENT APPLICATION NUMBER: US/10/207,655
/ CURRENT FILING DATE: 2002-07-25
/ NUMBER OF SEQ ID NOS: 426
/ SOFTWARE: Patentin version 3.0
/ SEQ ID NO 170
/ LENGTH: 458
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-10-207-655-170

Query Match          59.3%; Score 2024; DB 14; Length 458;
Best Local Similarity 99.2%; Pred. No. 4.6e-134;
Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 NMRGVPFRHLVLVQLALLPAATQGNKVVLGKKGTVELTCTASQKKSIOFHWKNSNOIK 60
DB 1 NMRGVPFRHLVLVQLALLPAATQGNKVVLGKKGTVELTCTASQKKSIOFHWKNSNOIK 60
QY 61 ILGNQGSFLTGGPSKLNDRADSRSLMDQGNPPLIIKULKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILGNQGSFLTGGPSKLNDRADSRSLMDQGNPPLIIKULKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDBTHLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDBTHLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 121 LVFGLTANSDBTHLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
DB 121 LVFGLTANSDBTHLQGGSLTTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELQDSG 180
QY 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFVTEKLTGSGELMW 240
QY 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKKEFKIDIVLAFOKASSIYKKEGEQVEFSFPLAFVTEKLTGSGELMW 240
QY 241 QAEKASSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
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|||||
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPRKQMGKKLPHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKXHOEVNLVVRATOLQKULTCCEWGPPTS PKLMLSLKLENKAKVSKREKPVW 360
DB 301 LEAKTGKXHOEVNLVVRATOLQKULTCCEWGPPTS PKLMLSLKLENKAKVSKREKAVW 360
QY 361 LNPEAGMWOCCLSDSGOVLLESNIKVLPTWSTPVP 396
DB 361 LNPEAGMWOCCLSDSGOVLLESNIKVLPTWSTPVP 396
RESULT 16
US-10-097-044A-1
; Sequence 1, Application US/10097044A
; Publication No.: US20030143220A1
; GENERAL INFORMATION:
; APPLICANT: Capon, Daniel J.
; Gregory, Timothy J.
; TITLE OF INVENTION: Adhesion Variants
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 460 Point San Bruno Blvd
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: pacin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/097,044A
FILING DATE: 28-May-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/457,918
FILING DATE: 1-JUN-1995
APPLICATION NUMBER: 08/236311
FILING DATE: 02-MAY-1994
APPLICATION NUMBER: 07/936190
FILING DATE: 26-AUG-1992
APPLICATION NUMBER: 07/842777
FILING DATE: 18-FEB-1992
APPLICATION NUMBER: 07/250785
FILING DATE: 28-SEP-1988
APPLICATION NUMBER: 07/104329
FILING DATE: 02-OCT-1987
ATTORNEY/AGENT INFORMATION:
NAME: Kubinec, Jeffrey S.
REGISTRATION NUMBER: 36,575
REFERENCE/DOCKET NUMBER: P0444PLC3
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-8228
TELEFAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 402 amino acids
TYPE: amino acid
TOPOLOGY: linear
SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-10-097-044A-1
Query Match 59.1%; Score 2017; DB 14; Length 402;
Best Local Similarity 99.7%; Pred. No. 1.2e-133;
Matches 392; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 MNRGVPFRHLILVLTALLPATQGNKVLGKGGDTVELTCTASQKSIQFHMNSNQIK 60
DB 1 MNRGVPFRHLILVLTALLPATQGNKVLGKGGDTVELTCTASQKSIQFHMNSNQIK 60

QY 61 ILGNQGSFLTKGPKLNDRADSRRLMDQGNFPIIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILGNQGSFLTKGPKLNDRADSRRLMDQGNFPIIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDTHLLOQGSFLTLESPPGSSPSVOCRRPRGNIOGGKTLVSQLELDSG 180
DB 121 LVFGLTANSDTHLLOQGSFLTLESPPGSSPSVOCRRPRGNIOGGKTLVSQLELDSG 180
QY 181 TWCTTVLQONQKVEFKIDIVLAFQKASSIYKKGEQOVERSPFLAFTVEKLTSGGELMW 240
DB 181 TWCTTVLQONQKVEFKIDIVLAFQKASSIYKKGEQOVERSPFLAFTVEKLTSGGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPRKQMGKKLPHLTLPOALPOYAGSGNLTIA 300
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPRKQMGKKLPHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKXHOEVNLVVRATOLQKULTCCEWGPPTS PKLMLSLKLENKAKVSKREKPVW 360
DB 301 LEAKTGKXHOEVNLVVRATOLQKULTCCEWGPPTS PKLMLSLKLENKAKVSKREKAVW 360
QY 361 LNPEAGMWOCCLSDSGOVLLESNIKVLPTWSTP 393
DB 361 LNPEAGMWOCCLSDSGOVLLESNIKVLPTWSTP 393
RESULT 17
US-10-151-274-3
; Sequence 3, Application US/10151274
; Publication No. US20030064071A1
; GENERAL INFORMATION:
; APPLICANT: Littman, Dan R.
; Applicant: Kwon, Douglas S.
; APPLICANT: van Kooyk, Yvette
; APPLICANT: Geltenbeck, Theo
; TITLE OF INVENTION: METHODS OF USING A FACILITATOR OF RETROVIRAL ENTRY
; TITLE OF INVENTION: INTO
; FILE REFERENCE: 1049-1-017
; CURRENT APPLICATION NUMBER: US/10/151,274
; PRIOR FILING DATE: 2002-05-20
; PRIOR APPLICATION NUMBER: US/09/517,605
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 458
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-151-274-3
Query Match 59.1%; Score 2016; DB 12; Length 458;
Best Local Similarity 99.0%; Pred. No. 1.7e-133;
Matches 392; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
QY 1 MNRGVPFRHLILVLTALLPATQGNKVLGKGGDTVELTCTASQKSIQFHMNSNQIK 60
DB 1 MNRGVPFRHLILVLTALLPATQGNKVLGKGGDTVELTCTASQKSIQFHMNSNQIK 60
QY 61 ILGNQGSFLTKGPKLNDRADSRRLMDQGNFPIIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILGNQGSFLTKGPKLNDRADSRRLMDQGNFPIIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDTHLLOQGSFLTLESPPGSSPSVOCRRPRGNIOGGKTLVSQLELDSG 180
DB 121 LVFGLTANSDTHLLOQGSFLTLESPPGSSPSVOCRRPRGNIOGGKTLVSQLELDSG 180
QY 181 TWCTTVLQONQKVEFKIDIVLAFQKASSIYKKGEQOVERSPFLAFTVEKLTSGGELMW 240
DB 181 TWCTTVLQONQKVEFKIDIVLAFQKASSIYKKGEQOVERSPFLAFTVEKLTSGGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPRKQMGKKLPHLTLPOALPOYAGSGNLTIA 300
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTDPRKQMGKKLPHLTLPOALPOYAGSGNLTIA 300

[illegible]

RESULT 18
US-08-681-219-27

; Sequence 27, Application US/08681219
; Publication No. US20020058607A1

1 GENERAL INFORMATION:
2 APPLICANT: Takeaki Sato and Junn Yanagisawa
3 TITLE OF INVENTION: COMPOUNDS THAT INHIBIT THE INTERACTION BETWEEN
4 TITLE OF INVENTION: SIGNAL-TRANSDUCING PROTEINS AND THE GLOF
5 TITLE OF INVENTION: (PDE/DHR) DOMAIN AND USES THEREOF
6 NUMBER OF SEQUENCES: 35
7 CORRESPONDENCE ADDRESS:

ADDRESSEE: Cooper & Dunham LLP
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:

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? APPLICATION NUMBER: US/08/681,219
? FILING DATE: 22-JUL-1996
? CLASSIFICATION: 435
? ATTORNEY/AGENT INFORMATION:
? NAME: white, John P
? REGISTRATION NUMBER: 28,678
? REFERENCE/DOCKET NUMBER: 0575/48962/JBW/JKM
? TELECOMMUNICATION INFORMATION:
? TELEPHONE: (212) 278-0400
? TELEFAX: (212) 391-0525
? INFORMATION FOR SEQ ID NO: 27:
? SEQUENCE CHARACTERISTICS:
? LENGTH: 458 amino acids
? TYPE: amino acid
? STRANDEDNESS: single
? TOPOLOGY: linear
? MOLECULE TYPE: peptide
? JS-08-681-219-27

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Qy	241	QARASSSSSWITTFDLKAKESVVRKVODPKLOMGKULPLHLTLPOLPYAAGSNTTLA	300
Db	241	QARASSSSSWITTFDLKAKESVVRKVODPKLOMGKULPLHLTLPOLPYAAGSNTTLA	300
Qy	301	LEKTKLHENVLYMRAATOLQKLTGEWGPSSPKLMTSLKLENEAVYSREKPVWY	360
Db	301	LEKTKLHENVLYMRAATOLQKLTGEWGPSSPKLMTSLKLENEAVYSREKPVWY	360
Qy	361	LNPEAGMMOCLLSDSGQVLLNESINIKYLPWTSTPYEP	396
Db	361	LNPEAGMMOCLLSDSGQVLLNESINIKYLPWTSTPYEP	396

RESULT 19
US-09-230-111C-25

; Sequence 25, Application US/09230111C
; Publication No. US20030203414A1

```

; GENERAL INFORMATION:
; APPLICANT: Sato, Taka-Aki
; APPLICANT: Yanagisawa, Jun
; TITLE OF INVENTION: COMPOUNDS THAT INHIBIT INTERACTION BETWEEN
; TITLE OF INVENTION: SIGNAL-TRANSDUCING PROTEINS AND THE GLGF (PDZ/DHR)
; TITLE OF INVENTION: DOMAIN AND USES THEREOF
; FILE REFERENCE: 48962-A-PCT-US
; CURRENT APPLICATION NUMBER: US/09/230,111C
; CURRENT FILING DATE: 1999-05-17
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 25
; LENGTH: 458
; TYPE: PRT
; ORGANISM: human
; US-09-230-111C-25

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Query Match	58.8%	Score 2006	DB 11	Length	458
Best Local Similarity	98.5%	Pred. No.	8.6e-133		
Matches 390; Conservative	2;	Mismatches	4;	Indels	0;
				Gaps	0

Qy	1	MNNGVPRHLLVLVLQALLPATQGNKVVLKKGDTVELTQTASOKKSIOFHMKNNOIK	60
Dp	1	MNNGVPRHLLVLVLQALLPATQGNKVVLKKGDTVELTQTASOKKSIOFHMKNNOIK	60
Qy	61	ILNNGSPFLTKGPSKLNDRPADRSRLSMQGNPPLIKLKITEDSDTYICEVEDOKEVOL	120
Dp	61	ILNNGSPFLTKGPSKLNDRPADRSRLSMQGNPPLIKLKITEDSDTYICEVEDOKEVOL	120
Qy	121	LVFGLTANSDFTHLQOGSLPTLLESPPSSPSVOCRSPRGKNIQGGKTLISVSOLELDDSG	180
Dp	121	LVFGLTANSDFTHLQOGSLPTLLESPPSSPSVOCRSPRGKNIQGGKTLISVSOLELDDSG	180
Qy	181	TWTCYVLQNOQKVEFKIDIVLVAFOKASSIYKKEGEBOVERSPFLAEVTEKLTGSGELMW	240
Dp	181	TWTCYVLQNOQKVEFKIDIVLVAFOKASSIYKKEGEBOVERSPFLAEVTEKLTGSGELMW	240
Qy	241	QAEARASSSKSWITFDLKNKESVKRVTODPKLQNGKKLPHLTLPLQALPOYAGSGNLTLA	300
Dp	241	QAEARASSSKSWITFDLKNKESVKRVTODPKLQNGKKLPHLTLPLQALPOYAGSGNLTLA	300
Qy	301	LEAKTGKLHQBENVLVYMRATQLOKKULTCEWNGPISPKMLMSLKENKEAKYSKREKVVW	360
Dp	301	LEAKTGKLHQBENVLVYMRATQLOKKULTCEWNGPISPKMLMSLKENKEAKYSKREKVVW	360
Qy	361	LNPEAGMOCCLSDSGOVLNESINIVLPTWSPPEP	396
Dp	361	LNPEAGMOCCLSDSGOVLNESINIVLPTWSPPEP	396

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RESULT 20
US-10-092-138-25
; Sequence 25, Application US/10092138
; Publication No. US20030170723A1
; GENERAL INFORMATION:
; APPLICANT: Sato, Taka-Aki

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; TITLE OF INVENTION: METHOD OF PREPARING A PROTEIN ARRAY BASED ON
; FILE OF INVENTION: BIOCHEMICAL PROTEIN-PROTEIN INTERACTION
; FILE REFERENCE: 65823/JPM/PT
; CURRENT APPLICATION NUMBER: US/10/092,138
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 25
; LENGTH: 458
; TYPE: PRT
; ORGANISM: human
; US-10-092-138-25

Query Match          58.8%; Score 2006; DB 14; Length 458;
Best Local Similarity 98.5%; Pred. No. 8.6e-133;
Matches 390; Conservative 2; Mismatches 4; Indels 0; Gaps 0;

QY 1 MNRGVFPHLLLVLTALLPAATOGNKKVVLGKGGDTVELTCTASQKSIQFHMKNNOIK 60
DB 1 MNRGVFPHLLLVLTALLPAATOGKAVVLGKGGDTVELTCTASQKSIQFHMKNNOIK 60
QY 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDFHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDFHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 121 LVFGLTANSDFHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDFHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWCTVTONQKKEFKIDIVLAFQKASSIYKKKEGQVPSFPLAFTVEKLTGSGELMW 240
DB 181 TWCTVTONQKKEFKIDIVLAFQKASSIYKKKEGQVPSFPLAFTVEKLTGSGELMW 240
QY 241 QAEKASSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPHLTLPOALPOYAGSGNLTLA 300
DB 241 QAEKASSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPHLTLPOALPOYAGSGNLTLA 300
QY 301 LEAKTGKLEHENVLVVNRATOLQKNLTCEVWGPTSPKLMSTLKENKAKYSKREKAVW 360
DB 301 LEAKTGKLEHENVLVVNRATOLQKNLTCEVWGPTSPKLMSTLKENKAKYSKREKAVW 360
QY 361 LNPEAGMWQCLLSDSGVLLSNNIKVLPWTSTPV 396
DB 361 LNPEAGMWQCLLSDSGVLLSNNIKVLPWTSTPV 396

RESULT 21
US-09-891-119A-2
; Sequence 2, Application US/09891119A
; Publication No. US20040013683A1
; GENERAL INFORMATION:
; APPLICANT: Maddon, Paul J.
; TITLE OF INVENTION: DERIVATIVES OF SOLUBLE T-4
; FILE REFERENCE: 24577-CY-B
; CURRENT APPLICATION NUMBER: US/09/891,119A
; CURRENT FILING DATE: 2001-06-25
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: Patent In version 3.1
; SEQ ID NO 2
; LENGTH: 397
; TYPE: PRT
; ORGANISM: Human
; US-09-891-119A-2

Query Match          58.6%; Score 2001; DB 11; Length 397;
Best Local Similarity 98.7%; Pred. No. 1.6e-132;
Matches 389; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY 1 MNRGVFPHLLLVLTALLPAATOGNKKVVLGKGGDTVELTCTASQKSIQFHMKNNOIK 60
DB 1 MNRGVFPHLLLVLTALLPAATOGKAVVLGKGGDTVELTCTASQKSIQFHMKNNOIK 60
QY 61 ILNGSGFLTKGSPSKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVOL 120

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DB 61 ILNGSGSLTKGSPSKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDFHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDFHLLOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWCTVTONQKKEFKIDIVLAFQKASSIYKKKEGQVPSFPLAFTVEKLTGSGELMW 240
DB 181 TWCTVTONQKKEFKIDIVLAFQKASSIYKKKEGQVPSFPLAFTVEKLTGSGELMW 240
QY 241 QAEKASSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPHLTLPOALPOYAGSGNLTLA 300
DB 241 QAEKASSKSWITFDLKNKEVSVKRVTDPKLQMGKPLPHLTLPOALPOYAGSGNLTLA 300
QY 301 LEAKTGKLEHENVLVVNRATOLQKNLTCEVWGPTSPKLMSTLKENKAKYSKREKAVW 360
DB 301 LEAKTGKLEHENVLVVNRATOLQKNLTCEVWGPTSPKLMSTLKENKAKYSKREKAVW 360
QY 361 LNPEAGMWQCLLSDSGVLLSNNIKVLPWTSTPV 394
DB 361 LNPEAGMWQCLLSDSGVLLSNNIKVLPWTSTPV 394

RESULT 22
US-10-097-044A-4
; Sequence 4, Application US/10097044A
; Publication No. US20030143220A1
; GENERAL INFORMATION:
; APPLICANT: Capon, Daniel J.
; TITLE OF INVENTION: Adhesion Variants
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 460 Point San Bruno Blvd
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: patin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/097,044A
; FILING DATE: 28-May-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/457,918
; FILING DATE: 1-JUN-1995
; APPLICATION NUMBER: 08/236311
; FILING DATE: 02-MAY-1994
; APPLICATION NUMBER: 07/936190
; FILING DATE: 26-AUG-1992
; APPLICATION NUMBER: 07/842777
; FILING DATE: 18-FEB-1992
; APPLICATION NUMBER: 07/250785
; FILING DATE: 28-SEP-1988
; APPLICATION NUMBER: 07/104329
; FILING DATE: 02-OCT-1987
; ATTORNEY/AGENT INFORMATION:
; NAME: Kubinec, Jeffrey S.
; REGISTRATION NUMBER: 36,575
; REFERENCE/DOCKET NUMBER: P0444P1C3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415/225-8228
; TELEFAX: 415/952-9881
; TELEEX: 910/371-7168
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 434 amino acids

```

TYPE: amino acid
TOPOLOGY: linear
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-10-097-044A-4

Query Match 55.8%; Score 1904; DB 14; Length 434;
Best Local Similarity 99.7%; Pred. No. 1.2e-125;
Matches 369; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 24 OGNKVLGKKGDVELTCTASQKSIQFHWKNSNOIKILGNOSFLLTKGSPKLNDRADR 83
DB 56 OGNKVLGKKGDVELTCTASQKSIQFHWKNSNOIKILGNOSFLLTKGSPKLNDRADR 115
QY 84 RSLMDGNFPLIILKLIKIEDSDTYICEVEDQKEEVQLVFGLTANSDFHLQGSLLTL 143
DB 116 RSLMDGNFPLIILKLIKIEDSDTYICEVEDQKEEVQLVFGLTANSDFHLQGSLLTL 175
QY 144 ESPGSSPSVQCSPRGKNIQGGKTLVSQLELDGSGTWTCTVLQNKVYEFKIDIVLA 203
DB 176 ESPGSSPSVQCSPRGKNIQGGKTLVSQLELDGSGTWTCTVLQNKVYEFKIDIVLA 235
QY 204 FOKASSIYKKEGEVFSFPLAFVTEKLTSGGELMWOAERASSKSWITFDLKNKEVS 263
DB 236 FOKASSIYKKEGEVFSFPLAFVTEKLTSGGELMWOAERASSKSWITFDLKNKEVS 295
QY 264 KRVTDPKLQMGKCLPLHLTPQALPOYAGSGNLTALBAKTGKLHGEVNLVWMATOLQ 323
DB 296 KRVTDPKLQMGKCLPLHLTPQALPOYAGSGNLTALBAKTGKLHGEVNLVWMATOLQ 355
QY 324 KULTCVWGPTSPKMLSLKENKAQVSKREKPVVNLPEAGMOCCLSDSGVLLSESN 383
DB 356 KULTCVWGPTSPKMLSLKENKAQVSKREKPVVNLPEAGMOCCLSDSGVLLSESN 415
QY 384 IKVLPWTSP 393
DB 416 IKVLPWTSP 425

RESULT 23

US-09-759-841-6
Sequence 6, Application US/09759841
Patent No. US20010039026X1
GENERAL INFORMATION:
APPLICANT: Rickett, Graham A
APPLICANT: Dobbs, Susan
APPLICANT: Petros, Manousos
TITLE OF INVENTION: Assay Method
FILE REFERENCE: PCI0348APME
CURRENT APPLICATION NUMBER: US/09/759,841
PRIOR FILING DATE: 2001-01-12
PRIOR APPLICATION NUMBER: GB 0000661.9
PRIOR FILING DATE: 2000-01-12
PRIOR APPLICATION NUMBER: GB 0000663.5
PRIOR FILING DATE: 2000-01-12
PRIOR APPLICATION NUMBER: GB 0000659.3
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 6
LENGTH: 370
TYPE: PRT
ORGANISM: Homo sapiens
US-09-759-841-6

Query Match 55.4%; Score 1891; DB 9; Length 370;
Best Local Similarity 99.7%; Pred. No. 8.1e-125;
Matches 367; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 27 KVLGKGDVELTCTASQKSIQFHWKNSNOIKILGNOSFLLTKGSPKLNDRADR 86
DB 2 KVLGKGDVELTCTASQKSIQFHWKNSNOIKILGNOSFLLTKGSPKLNDRADR 61
QY 87 WDOGNFPLIILKLIKIEDSDTYICEVEDQKEEVQLVFGLTANSDFHLQGSLLTLLESP 146

DB 62 WDOGNFPLIILKLIKIEDSDTYICEVEDQKEEVQLVFGLTANSDFHLQGSLLTLLESP 121
QY 147 PGSSPSVQCSPRGKNIQGGKTLVSQLELDGSGTWTCTVLONOKVEKIDIVLAPOK 206
DB 122 PGSSPSVQCSPRGKNIQGGKTLVSQLELDGSGTWTCTVLONOKVEKIDIVLAPOK 181
QY 207 ASSIYKKEGEVFSFPLAFVTEKLTSGGELMWOAERASSKSWITFDLKNKEVS 266
DB 182 ASSIYKKEGEVFSFPLAFVTEKLTSGGELMWOAERASSKSWITFDLKNKEVS 241
QY 267 TDDPKLQMGKCLPLHLTPQALPOYAGSGNLTALBAKTGKLHGEVNLVWMATOLQ 326
DB 242 TDDPKLQMGKCLPLHLTPQALPOYAGSGNLTALBAKTGKLHGEVNLVWMATOLQ 301
QY 327 TCEVWGPTSPKMLSLKENKAQVSKREKPVVNLPEAGMOCCLSDSGVLLSESN 386
DB 302 TCEVWGPTSPKMLSLKENKAQVSKREKPVVNLPEAGMOCCLSDSGVLLSESN 361
QY 387 LPTWSTPV 394
DB 362 LPTWSTPV 369

RESULT 24

US-10-024-329-32
Sequence 32, Application US/10024329
Publication No. US20030157063A1
GENERAL INFORMATION:
APPLICANT: SANHADJI, Kamel
APPLICANT: TOURAINE, Jean-Louis
APPLICANT: LEROY, Pierre
APPLICANT: MEHTALI, Majid
TITLE OF INVENTION: Gene therapy using anti-gp41 antibody and cd4 immunoadhesin
FILE REFERENCE: 109993
CURRENT APPLICATION NUMBER: US/10/024,329
PRIOR FILING DATE: 2001-12-21
NUMBER OF SEQ ID NOS: 33
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 32
LENGTH: 448
TYPE: PRT
ORGANISM: human scd4
US-10-024-329-32

Query Match 55.3%; Score 1886.5; DB 14; Length 448;
Best Local Similarity 96.7%; Pred. No. 2.2e-124;
Matches 383; Conservative 1; Mismatches 3; Indels 9; Gaps 8;

QY 1 MNRGVPFPHLLVLTALPAATQGNKVLGKKGDVELTCTASQKSIQFHWKNSNOIK 60
DB 1 MNRGVPF-HLLVLTALPAATQGNKVLGKKGDVELTCTASQKSIQFHWKNSNOIK 59
QY 61 ILGNOSFLLTKGSPKLNDRADRSLMDQGNFPLIILKLIKIEDSDTYICEVEDQKEEVQL 120
DB 60 ILGNOSFLLTKGSPKLNDRADRSLMDQGNFPLIILKLIKIEDSDTYICEVEDQKEEVQL 117
QY 121 LVFGLTANSDFHLQGSLLTLLESPPGSSPSVQCSPRGKNIQGGKTLVSQLELDGSG 180
DB 118 LVFGLTANSDFHLQGSLLTLLESPPGSSPSVQCSPR-KNI-GKTLVS-LELDGSG 174
QY 181 TWTCTVLONOKVEKIDIVLAPOKASSIYKKEGEVFSFPLAFVTEKLTSGGELMW 240
DB 175 TWTCTVLON-KVEKIDIVLAPOKASSIYKKEGEVFSFPLAFVTEKLTSGGELMW 231
QY 241 QAERASSKSWITFDLKNKEVSVKRVTDPKLQMGKCLPLHLTPQALPOYAGSGNLTILA 300
DB 232 QAERASSKSWITFDLKNKEVSVKRVTDPKLQMGKCLPLHLTPQALPOYAGSGNLTILA 291
QY 301 LEAKTGKLHGEVNLVWMATOLQKULTCVWGPTSPKMLSLKENKAQVSKREKPVV 360
DB 292 LEAKTGKLHGEVNLVWMATOLQKULTCVWGPTSPKMLSLKENKAQVSKREKPVV 351


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Db 455 HNAKTPREBOYNSTRVVSVLTVCHQDMLNGKEYCKVSNKALPAPIEKTISKAGQPR 514
Qy 524 EPQVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVWESNQPENNYKTTTPVLVDSGSF 583
Db 515 EPQVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVWESNQPENNYKTTTPVLVDSGSF 574
Qy 584 FLYSKLTVDKSRMOQGNVFSQSVMEHALHNHYTQKSLSLSPG 625
Db 575 FLYSKLTVDKSRMOQGNVFSQSVMEHALHNHYTQKSLSLSPG 616

RESULT 27
US-10-363-427-22
; Sequence 22, Application US/10363427
; Publication No. US20030195338A1
; GENERAL INFORMATION:
; APPLICANT: Medexgen Inc.
; APPLICANT: CHUNG, Yong Hoon
; APPLICANT: HAN, Ji Moong
; APPLICANT: LEE, Hye Ja
; APPLICANT: CHOI, Eun Yong
; APPLICANT: KIM, Jin Mi
; APPLICANT: YIM, Soo Bin
; TITLE OF INVENTION: Concatameric Immunoadhesion
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/363,427
; CURRENT FILING DATE: 2003-02-28
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Kopatentin 1.71
; SEQ ID NO 22
; LENGTH: 617
; TYPE: PR1
; ORGANISM: Homo sapiens
US-10-363-427-22

Query Match 39.6%; Score 1351.5; DB 14; Length 617;
Best Local Similarity 49.7%; Pred. No. 1.5e-86;
Matches 319; Conservative 52; Mismatches 140; Indels 131; Gaps 22;

Qy 35 DTVELTCTASQKKSIFQHKNSNQIKILNQGSFLTQKPSKLNDRASRRSLMDQNFPL 94
Db 55 DDIKWEKTSQKKAIAQFRKEKE-----TFKEKDTYKLPK-----NGTL 92
Qy 95 IIKNLKIEDSDTYICEVEQK-EEVQLLVPGLTANSNDHLQO-----SLTIT 142
Db 93 KIKHLTDDODIYKVASIYDTKGNVLEKIFDLK-----IOBRVSKPISWTCINTTTL 145
Qy 143 LESPSSPSVQCRSPRGKNIQGGKTLVSQLELQDSGTMTCTVLQNKVFEKIDIVL 202
Db 146 CEVWNGTDELNL-----YQDGHKLSQRYI--THKWTISL-----SAKFK---CT 187
Qy 203 AFQKASSIYVKKGEQVEFSFPLAFTVEKLTGSGELM----- 239
Db 188 AGNKVS-----KSSVENVSCF-----KNITNLEWGMALGODINDIPFGMSDDIDI 237
Qy 240 -WOAERASSSKWITTD-----LNKKEVSVKRVTPQPKLOMGKCLRHLTL 284
Db 238 KW--EKTSQKKAIAQFRKEKETFEKDTYKLFQNGTLKIKHLKTD--ODIYVSIYDT- 292
Qy 285 PQALPQYAGSNTLTLLEAKTGKLNQEVNLVWBRATQLOKNLTCEWGTSPRLMLSLK 344
Db 293 -----KGNVLEKIFDL-----KIQSRVSKPKISWTCINTTTLCEVWNGTDEP--LNLVQ 340
Qy 345 ENKEATVSKRE-KPVVWLNPEAGMOCCLSDSGQVLLLESNIKVLPTWSTPVEPKSCDKTH 403
Db 341 DGHGLKLSQKVIHNMKTTISLA-KFKC--TAGNKVSKSSVEPV---SCPAPKSCDKTH 394
Qy 404 TCPPCAPPELLGGRSVFLPPPKPDITLMSITREVTCCVVVDVSHEDPEVKFNMYVDGEV 463
Db 395 TCPPCAPPELLGGRSVFLPPPKPDITLMSITREVTCCVVVDVSHEDPEVKFNMYVDGEV 454
Qy 464 HNAKTPREBOYNSTRVVSVLTVLHQMNLNGKEYCKVSNKALPAPIEKTISKAGQPR 523
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|||||
Db 455 HNAKTPREBOYNSTRVVSVLTVCHQDMLNGKEYCKVSNKALPAPIEKTISKAGQPR 514
Qy 524 EPQVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVWESNQPENNYKTTTPVLVDSGSF 583
Db 515 EPQVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVWESNQPENNYKTTTPVLVDSGSF 574
Qy 584 FLYSKLTVDKSRMOQGNVFSQSVMEHALHNHYTQKSLSLSPG 625
Db 575 FLYSKLTVDKSRMOQGNVFSQSVMEHALHNHYTQKSLSLSPG 616

RESULT 28
US-09-935-868-8
; Sequence 8, Application US/09935868
; Patent No. US20020164690A1
; GENERAL INFORMATION:
; APPLICANT: Regeneron Pharmaceuticals, Inc
; TITLE OF INVENTION: Receptor Based Antagonists, and Methods of Making and Using
; FILE REFERENCE: REG 203D
; CURRENT APPLICATION NUMBER: US/09/935,868
; PRIOR APPLICATION NUMBER: PCT/US99/22045
; PRIOR FILING DATE: 1999-09-22
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 8
; LENGTH: 592
; TYPE: PR1
; ORGANISM: Homo sapiens
US-09-935-868-8

Query Match 38.7%; Score 1320; DB 9; Length 592;
Best Local Similarity 48.3%; Pred. No. 2.4e-84;
Matches 312; Conservative 53; Mismatches 161; Indels 120; Gaps 18;

Qy 20 PATQGNKVLGKKDDTVELTCTASQ-KKSIQFHKNNSNQIKILNQGSFLTQKPSKLNDR 78
Db 26 PAQEVARGVLSLPDSDVTLTCTGVEPBDNATVNH-----VLAKKA----- 66
Qy 79 RADSRRLMDQGNFPLIILKNIKIEDSDTYICE-----VEDQKEVQLLVPGLT 126
Db 67 -AGHPSRWAGGRGLRLRSVQLHDSGNVSCYRAGRAGTVNHLVDVPEEPQLSCFRKS 125
Qy 127 ANSDHLLQGSGLTILSPSSPSVQCRSPRGKNIQGGKTLVSQLELQDSGTMTCTV 186
Db 126 PLSN-----VVCWGRSTPSLTTKA-----VLVRKQNSPADFOEPC 165
Qy 187 LONOKVFEKIDIVLAFQKASSIYVKKGEQVEFSFPLAFTVEKLTGSGELM----- 238
Db 166 QYSQESQKFCQALAVPEQDSSFIYVSMCVASSVGSKFEKTQTFQ--GGILQPRPANI 222
Qy 239 -----W-----WOAERASSSKW--ITDILKNKEVSVKRVTPQPKLOMGKCLRHLTL 283
Db 223 TVTAVARNPRLVSWQDPSHNSGFYRLRELYRVARSRKTFG---TWNVKQLOHHCV 278
Qy 284 LPQALPQYAGSNTLTLLEAKTGKLNQEVNLVWBRATQLOKNLTCEWGTSPRLMLSLK 343
Db 279 IH-----DAWSGLNH-----VQQLA---OEFGGGEWSEWSPRAMGTW 315
Qy 344 LENK-----EAKVSKREKPVVWLNPEAGMOCCLSDSGQVLLLESNIKVLPTWSTPVEPKSC 399
Db 316 TESRRPRLBNEVS--TPWQALTTNKDDNLIIFRDS-----ANNTSLPVQDAG-EPKSC 365
Qy 400 DKHTCPPCAPPELLGGRSVFLPPPKPDITLMSITREVTCCVVVDVSHEDPEVKFNMYVD 459
Db 366 DKHTCPPCAPPELLGGRSVFLPPPKPDITLMSITREVTCCVVVDVSHEDPEVKFNMYVD 425
Qy 460 GVEVNAKTPREBOYNSTRVVSVLTVLHQMNLNGKEYCKVSNKALPAPIEKTISKAG 519
Db 426 GVEVNAKTPREBOYNSTRVVSVLTVLHQMNLNGKEYCKVSNKALPAPIEKTISKAG 485
Qy 520 GQPRBPQVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVWESNQPENNYKTTTPVLVDS 579
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Db 486 GQPREPQVYTLPPSDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD 545
Qy 580 DGSFFLYSKLTVDKSRMWOQGVFSCSVMHREALHNYTOKSLSLSPG 625
Db 546 DGSFFLYSKLTVDKSRMWOQGVFSCSVMHREALHNYTOKSLSLSPG 591

RESULT 29
US-10-287-035-8
; Sequence 8, Application US/10287035
; Publication No. US20030104567A1
; GENERAL INFORMATION:
; APPLICANT: Neil Stahl and George D. Yancopoulos
; TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
; TITLE OF INVENTION: AND USING
; FILE REFERENCE: REG 203DA
; CURRENT APPLICATION NUMBER: US/10/287,035
; CURRENT FILING DATE: 2002-11-01
; PRIOR APPLICATION NUMBER: USSN 09/935,868
; PRIOR FILING DATE: 2001-08-23
; PRIOR APPLICATION NUMBER: USSN 09/787,835
; PRIOR FILING DATE: 2001-03-22
; PRIOR APPLICATION NUMBER: USSN 09/313,942
; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 09/313,942
; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 60/101,858
; PRIOR FILING DATE: 1998-09-25
; NUMBER OF SEQ ID NOS: 60
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 592
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-287-035-8

Query Match 38.7%; Score 1320; DB 14; Length 592;
Best Local Similarity 48.3%; Pred. No. 2,4e-84;
Matches 312; Conservative 53; Mismatches 161; Indels 120; Gaps 18;

Qy 20 PAATQGNKVVLAGKGDVLTCTASQ-KKSIQFWKNSNQKIIGNQSFLTGPISKND 78
Db 26 PAQVARGVLTSLPQDSVTLTCPEVPEPDNATVHW-----VLKRA----- 66
Qy 79 RADSRRLMDQGNPFLIKLKIEDSDTYICE-----VEDQKEVQLLVFGLT 126
Db 67 -AGSHPRMAGMGRLLRLRSVQLHDSGNISCTYRAGRPAQVYHLLVDVPEEPQLSCFRKS 125
Qy 127 ANSDTHLLQGQSLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCV 186
Db 126 PLSN-----VCEMGPRSTPSLTTKA-----VLLVRKFQNSPAEDFQPC 165
Qy 187 LQNGKVEFKIDIVVLAFOKASSIYKKEGEOVESFPLAFTVEKLTGSGEL----- 238
Db 166 QYSQESQKFSQCLAVPEGDSFYIVSMCVASSVSGSKSKTQFQ---GCGILQDPPIANI 222
Qy 239 -----W-----MOABRASSSKSW-ITFDLKNKEVSVKRVYQDPKLOMGKPLPLLT 283
Db 223 TVTAVARNPRMLSTWQDPHSMNSFYRLRFLRYRAERSKFTF---TMVVKDLOHHCV 278
Qy 284 LPOALPOYAGSGNLTLEAKTGKLGQEVNLVVMRATOLQKNLTCEVWGPTSPKLMISLK 343
Db 279 IH-----DAMSGLRH-----VVGQRA---QEEFGQGESEWSPEAMGTPW 315
Qy 344 LENK-----EAKYSKREKRPVWVLANPEAGMOCCLSDSGOVLLESNIKVLPTMSTVEPESC 399
Db 316 TESRSPEAENEVS---TPMQALTTNKDDNLTFRDS-----ANATSLPVQDAG-EPKSC 365
Qy 400 DKTHCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDDEVKFNWYVD 459
Db 366 DKTHCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDDEVKFNWYVD 425
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Qy 460 GVEVNAKTKPREBOYNSTYRVVSVLTVLHQDWINGKEYKCKVSNKALPAPIETISKAK 519
Db 426 GVEVNAKTKPREBOYNSTYRVVSVLTVLHQDWINGKEYKCKVSNKALPAPIETISKAK 485
Qy 520 GQPREPQVYTLPPSDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD 579
Db 486 GQPREPQVYTLPPSDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLD 545

Qy 580 DGSFFLYSKLTVDKSRMWOQGVFSCSVMHREALHNYTOKSLSLSPG 625
Db 546 DGSFFLYSKLTVDKSRMWOQGVFSCSVMHREALHNYTOKSLSLSPG 591

RESULT 30
US-10-282-162-8
; Sequence 8, Application US/10282162
; Publication No. US20030143697A1
; GENERAL INFORMATION:
; APPLICANT: REGENERON PHARMACEUTICALS, INC.
; TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
; TITLE OF INVENTION: AND USING
; FILE REFERENCE: REG 203-B-US
; CURRENT APPLICATION NUMBER: US/10/282,162
; CURRENT FILING DATE: 2002-10-28
; PRIOR APPLICATION NUMBER: 09/787,835
; PRIOR FILING DATE: 1999-09-22
; PRIOR APPLICATION NUMBER: PCT/US99/22045
; PRIOR FILING DATE: 1999-09-22
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 592
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-282-162-8

Query Match 38.7%; Score 1320; DB 14; Length 592;
Best Local Similarity 48.3%; Pred. No. 2,4e-84;
Matches 312; Conservative 53; Mismatches 161; Indels 120; Gaps 18;

Qy 20 PAATQGNKVVLAGKGDVLTCTASQ-KKSIQFWKNSNQKIIGNQSFLTGPISKND 78
Db 26 PAQVARGVLTSLPQDSVTLTCPEVPEPDNATVHW-----VLKRA----- 66
Qy 79 RADSRRLMDQGNPFLIKLKIEDSDTYICE-----VEDQKEVQLLVFGLT 126
Db 67 -AGSHPRMAGMGRLLRLRSVQLHDSGNISCTYRAGRPAQVYHLLVDVPEEPQLSCFRKS 125
Qy 127 ANSDTHLLQGQSLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCV 186
Db 126 PLSN-----VCEMGPRSTPSLTTKA-----VLLVRKFQNSPAEDFQPC 165
Qy 187 LQNGKVEFKIDIVVLAFOKASSIYKKEGEOVESFPLAFTVEKLTGSGEL----- 238
Db 166 QYSQESQKFSQCLAVPEGDSFYIVSMCVASSVSGSKSKTQFQ---GCGILQDPPIANI 222
Qy 239 -----W-----MOABRASSSKSW-ITFDLKNKEVSVKRVYQDPKLOMGKPLPLLT 283
Db 223 TVTAVARNPRMLSTWQDPHSMNSFYRLRFLRYRAERSKFTF---TMVVKDLOHHCV 278
Qy 284 LPOALPOYAGSGNLTLEAKTGKLGQEVNLVVMRATOLQKNLTCEVWGPTSPKLMISLK 343
Db 279 IH-----DAMSGLRH-----VVGQRA---QEEFGQGESEWSPEAMGTPW 315
Qy 344 LENK-----EAKYSKREKRPVWVLANPEAGMOCCLSDSGOVLLESNIKVLPTMSTVEPESC 399
Db 316 TESRSPEAENEVS---TPMQALTTNKDDNLTFRDS-----ANATSLPVQDAG-EPKSC 365
Qy 400 DKTHCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDDEVKFNWYVD 459
Db 366 DKTHCCPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDDEVKFNWYVD 425
Qy 460 GVEVNAKTKPREBOYNSTYRVVSVLTVLHQDWINGKEYKCKVSNKALPAPIETISKAK 519
```

Db 426 GVEVHNAKTKPREEOYNSTRVSVLTVLHODWLNKEYCKVSNKALPAPIEKTISKAK 485
QY 520 GGPREFVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVEMSNQPPENNYKTPPVLD 579
Db 486 GGPREFVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVEMSNQPPENNYKTPPVLD 545
QY 580 DGSFFLYSKLTVDKSRMOQGNVFCGVMEALHNHYTKSLSPG 625
Db 546 DGSFFLYSKLTVDKSRMOQGNVFCGVMEALHNHYTKSLSPG 591

RESULT 31
US-10-207-655-345
; Sequence 345, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden-Ledbetter, Martha S.
; TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
; FILE REFERENCE: 390069, 401C1
; CURRENT APPLICATION NUMBER: US/10/207,655
; CURRENT FILING DATE: 2002-07-25
; NUMBER OF SEQ ID NOS: 426
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 345
; LENGTH: 543
; TYPE: PRP
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion polypeptide
US-10-207-655-345

Query Match 38.6%; Score 1319; DB 14; Length 543;
Best Local Similarity 47.6%; Pred. No. 2,5e-84;
Matches 304; Conservative 43; Mismatches 112; Indels 180; Gaps 17;

QY 1 NMRGVPRHLLVLTQALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNSNQIK 60
Db 19 MSRGVD-----IVL-----TQSPITIASPGKVTITCRASSSVSYMYVQKSS--- 62
QY 61 ILGNQGSFLTKGSPKLNDRASRSRLMDQG-NFPLIKNLKIEDSDTYICEVEDOKEVQ 119
Db 63 --GASPKLMIYDTSKLASGVNRFSGSGSGTSYSLAINTMETEDATYYCQ----- 111
QY 120 LLVFGLTANSDFHLQGGSLTTLTLESPSSPSVQCRSPRGKNIQGGKTLVSQLELQDS 179
Db 112 -----QMSSTPLTF---GSGTKLEIKRGGSGSGSGSGGSGGSGGSGGSGG 152
QY 180 G-----TWCTVLQNKQKVEFKIDIVVLAQKASSIYKKGEQVEFSPLAFV 229
Db 153 GEGVLQPTQTLSLTCTV-----SGFS----- 173
QY 230 EKLTSGGELMWAERASSSKSWITFDLKNKEVSVKRVTQDPKLOMGKPLHLTLPLALP 289
Db 174 --LTSQGVHW-----IRQPP-----GKGLEW-----MGII 196
QY 290 QYAGSGLTLALBAKTKLHQEVNVLVWRATQLOKNLTCEVWGPPSPKMLSLKLENKEA 349
Db 197 YDGGTDYNSAIKSR-----LSISRDTS-----KSQVFLKINSIQ- 231
QY 350 KVSKEKEPVWVLPNPAQMOCL---LSDSGOVLLESNIKVLPTWSTPVPKSCDTHHCP 406
Db 232 -----TDDTAMYCARIHFDYWGQ-----GAWVTYVSDDEPKSCDTHHCP 272
QY 407 PCPAPELLGGPSVFLFPKPKDITLMISTRPEVTCVVDVSHEDPEVKFNMYVDGVEVNA 466
Db 273 PCPAPELLGGPSVFLFPKPKDITLMISTRPEVTCVVDVSHEDPEVKFNMYVDGVEVNA 332
QY 467 KTKPREEOYNSTRVSVLTVLHODWLNKEYCKVSNKALPAPIEKTISKAKGPREPO 526
Db 333 KTKPREEOYNSTRVSVLTVLHODWLNKEYCKVSNKALPAPIEKTISKAKGPREPO 392

QY 527 VYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVEMSNQPPENNYKTPPVLDSDSFFLY 586
Db 393 VYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVEMSNQPPENNYKTPPVLDSDSFFLY 452
QY 587 SKLTVDKSRMOQGNVFCGVMEALHNHYTKSLSPG 625
Db 453 SKLTVDKSRMOQGNVFCGVMEALHNHYTKSLSPG 491

RESULT 32
US-10-207-655-344
; Sequence 344, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden-Ledbetter, Martha S.
; TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
; FILE REFERENCE: 390069, 401C1
; CURRENT APPLICATION NUMBER: US/10/207,655
; CURRENT FILING DATE: 2002-07-25
; NUMBER OF SEQ ID NOS: 426
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 344
; LENGTH: 492
; TYPE: PRP
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion polypeptide
US-10-207-655-344

Query Match 38.5%; Score 1316; DB 14; Length 492;
Best Local Similarity 47.6%; Pred. No. 3,6e-84;
Matches 304; Conservative 42; Mismatches 113; Indels 180; Gaps 17;

QY 1 NMRGVPRHLLVLTQALLPAATQGNKVVLGKKGDTVELTCTASQKSIQFHMKNSNQIK 60
Db 19 MSRGVD-----IVL-----TQSPITIASPGKVTITCRASSSVSYMYVQKSS--- 62
QY 61 ILGNQGSFLTKGSPKLNDRASRSRLMDQG-NFPLIKNLKIEDSDTYICEVEDOKEVQ 119
Db 63 --GASPKLMIYDTSKLASGVNRFSGSGSGTSYSLAINTMETEDATYYCQ----- 111
QY 120 LLVFGLTANSDFHLQGGSLTTLTLESPSSPSVQCRSPRGKNIQGGKTLVSQLELQDS 179
Db 112 -----QMSSTPLTF---GSGTKLEIKRGGSGSGSGSGGSGGSGGSGGSGG 152
QY 180 G-----TWCTVLQNKQKVEFKIDIVVLAQKASSIYKKGEQVEFSPLAFV 229
Db 153 GEGVLQPTQTLSLTCTV-----SGFS----- 173
QY 230 EKLTSGGELMWAERASSSKSWITFDLKNKEVSVKRVTQDPKLOMGKPLHLTLPLALP 289
Db 174 --LTSQGVHW-----IRQPP-----GKGLEW-----MGII 196
QY 290 QYAGSGLTLALBAKTKLHQEVNVLVWRATQLOKNLTCEVWGPPSPKMLSLKLENKEA 349
Db 197 YDGGTDYNSAIKSR-----LSISRDTS-----KSQVFLKINSIQ- 231
QY 350 KVSKEKEPVWVLPNPAQMOCL---LSDSGOVLLESNIKVLPTWSTPVPKSCDTHHCP 406
Db 232 -----TDDTAMYCARIHFDYWGQ-----GAWVTYVSDDEPKSCDTHHCP 272
QY 407 PCPAPELLGGPSVFLFPKPKDITLMISTRPEVTCVVDVSHEDPEVKFNMYVDGVEVNA 466
Db 273 PCPAPELLGGPSVFLFPKPKDITLMISTRPEVTCVVDVSHEDPEVKFNMYVDGVEVNA 332
QY 467 KTKPREEOYNSTRVSVLTVLHODWLNKEYCKVSNKALPAPIEKTISKAKGPREPO 526
Db 333 KTKPREEOYNSTRVSVLTVLHODWLNKEYCKVSNKALPAPIEKTISKAKGPREPO 392
QY 527 VYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVEMSNQPPENNYKTPPVLDSDSFFLY 586
Db 393 VYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVEMSNQPPENNYKTPPVLDSDSFFLY 452

QY 587 SKLTVDKSRMOQGNVFCSSVMHEALHNHYTOKSLSLSPG 625
DB 453 SKLTVDKSRMOQGNVFCSSVMHEALHNHYTOKSLSLSPG 491

RESULT 33

US-10-363-427-14
; Sequence 14, Application US/10363427
; Publication No. US20030195538A1
; GENERAL INFORMATION:
; APPLICANT: Medexgen Inc.
; APPLICANT: CHUNG, Yong Hoon
; APPLICANT: HAN, Ji Woong
; APPLICANT: LEE, Hye Ja
; APPLICANT: CHOI, Eun Yong
; APPLICANT: KIM, Jin Mi
; APPLICANT: YIM, Soo Bin
; TITLE OF INVENTION: Concatametric Immunoadhesion
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/363,427
; CURRENT FILING DATE: 2003-02-28
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Kopatentin 1.71
; SEQ ID NO 14
; LENGTH: 437
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-363-427-14

Query Match 38.5%; Score 1313.5; DB 14; Length 437;
Best Local Similarity 79.7%; Pred. No. 4.6e-84;
Matches 255; Conservative 19; Mismatches 37; Indels 9; Gaps 5;

QY 307 KLHGVNVLVWRATOLQKLTCEVWGPTSPKMLSLKLENKAKYSKRE-KPVWVLNBEA 365
DB 125 KIQEVSRSRKISWTCINTTLTCEVWNGTDP--LNLVYDGRKLKLSQRIITHKWTSLSA 182
QY 366 GMMOCLSDSGGVLESNIKVLPTWSTVEPKSCDKHTCPCPAPPELLGGSPVLFPPK 425
DB 133 -KFKC--TAGNKVSKSSVEPV--SCPAEPKSCDKHTCPCPAPPELLGGSPVLFPPK 236
QY 426 PKDTLMISRTPEVTCVVDVSHEDPEVKFNWVVDGVEVHNAKTKREBOYNSTYRVSVL 485
DB 237 PKDTLMISRTPEVTCVVDVSHEDPEVKFNWVVDGVEVHNAKTKREBOYNSTYRVSVL 296
QY 466 TVLHODMNLGKRYKCKVSNKALPAIETKISKAKQPREPOVYTLPSRDELTKQVSLT 545
DB 297 TVLHODMNLGKRYKCKVSNKALPAIETKISKAKQPREPOVYTLPSRDELTKQVSLT 356
QY 546 CLVKGFPYSDIAVWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRMOQGNVFCSS 605
DB 357 CLVKGFPYSDIAVWESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRMOQGNVFCSS 416
QY 606 VMHEALHNHYTOKSLSLSPG 625
DB 417 VMHEALHNHYTOKSLSLSPG 436

RESULT 34

US-10-207-655-348
; Sequence 348, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden-Ledbetter, Martha S.
; TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
; FILE REFERENCE: 390069, 401C1
; CURRENT APPLICATION NUMBER: US/10/207,655
; NUMBER OF SEQ ID NOS: 426
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 348

LENGTH: 504
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion polypeptide
US-10-207-655-348

Query Match 38.5%; Score 1313; DB 14; Length 504;
Best Local Similarity 48.1%; Pred. No. 6e-84;
Matches 306; Conservative 45; Mismatches 123; Indels 162; Gaps 18;

QY 1 MNRGVPRHLLVLQLALLPAATQGNKVLGKKDTELTCTASQKSIQHN--KNSN 57
DB 19 MSRGVDIQ-----MTQTSSLASLSDRVTISCRASQDIRNYLWVQOKPXD 65
QY 58 QIKILNGQSFLLTGSPSKLNDRAISRSLMDQG-NFLILIKNLIEDSDTYICEVEQKE 116
DB 66 TVKLL--LYYT--SRLSGVSPRSFGSGSGTDTLTIANLQPEDIAITFCQ----- 112
QY 117 EVQLVLEGLTANSDPHLLQGSLLTLTLESPPGSSPSYQCRSPRGKNIQGGKT--LSVSQ 173
DB 113 -----QNTLPMTF--GGTKLVTKRELGGSGGGGGGGGGGGGGGGGGGG 151
QY 174 LEIQDGTWTCTVLQNGKVEFKIDIVLAFQKASIVYKKEGQVEBPPLATVEKLT 233
DB 152 VOLQSGP-----ELV---KPGASMSCRASG---YSF-TGYIVN--- 183
QY 234 GSGELMWQAEBAASSKSMITFDLKNKEVSVRVYQDPKLOKGLPLHLTLPOALPOYAG 293
DB 184 -----MLKSHGKNLEWIGLINPYKGLT---TYNQKFK----- 213
QY 294 SGNLTLLAEAKTKLHGVNVLVWRATOLQKLTCEVWGPTSPKMLSLKLENKAKYSK 353
DB 214 -GKATLVVDKSSSTRAYNE-----LSTLSE----- 237
QY 354 REKPVWVLNBPAGMMOCLLS---DSGQVLESNIKVLPTWSTVEPKSCDKHTCPCP 409
DB 238 -----DSAVYYCARSGYVDSDMVFDWAGTIVTVSSQOEPKSCDKHTCPCP 287
QY 410 APPELLGGSPVLFPPKDKDTLMISRTPEVTCVVDVSHEDPEVKFNWVVDGVEVHNAKTK 469
DB 288 APPELLGGSPVLFPPKDKDTLMISRTPEVTCVVDVSHEDPEVKFNWVVDGVEVHNAKTK 347
QY 470 PREBOYNSTYRVSVLTVLHODMNLGKRYKCKVSNKALPAIETKISKAKQPREPOVYTL 529
DB 348 PREBOYNSTYRVSVLTVLHODMNLGKRYKCKVSNKALPAIETKISKAKQPREPOVYTL 407
QY 530 LPSRDELTKQVSLTCLVKGFPYSDIAVWESNGQPENNYKTPPVLDSDGSFFLYSKL 589
DB 408 LPSRDELTKQVSLTCLVKGFPYSDIAVWESNGQPENNYKTPPVLDSDGSFFLYSKL 467
QY 590 TVDKSRMOQGNVFCSSVMHEALHNHYTOKSLSLSPG 625
DB 468 TVDKSRMOQGNVFCSSVMHEALHNHYTOKSLSLSPG 503

RESULT 35

US-09-815-108-22
; Sequence 22, Application US/09815108
; Patent No. US20020009776A1
; GENERAL INFORMATION:
; APPLICANT: Saris, Christiaan M.
; APPLICANT: Sharon, Mu X.
; APPLICANT: Xia, Min
; APPLICANT: Boone, Thomas Charles
; APPLICANT: Covey, Todd
; TITLE OF INVENTION: Fibroblast Growth Factor Receptor-like Molecules and
; FILE REFERENCE: 99-513-A
; CURRENT APPLICATION NUMBER: US/09/815,108
; CURRENT FILING DATE: 2001-03-22
; PRIOR APPLICATION NUMBER: 60/191,379
; PRIOR FILING DATE: 2000-03-22

Query Match	38.4%	Score 1312	DB 9	Length 594
Best Local Similarity	44.9%	Pred. No. 6,8e-84		
Matches 315	Conservative 55	Mismatches 130	Indels 202	Gaps 21
NUMBER OF SEQ ID NOS: 22 SOFTWARE: Patentin Ver. 2.10 SEQ ID NO 22 LENGTH: 594 TYPE: PRT ORGANISM: Artificial Sequence FEATURE: OTHER INFORMATION: Description of Artificial Sequence: murine FcγR-L OTHER INFORMATION: extracellular domain-Fc fusion polypeptide US-09-815-108-22				
QY	11	LLVLQALLPAA-----TGKRV-----LGR-----KGDVELTCTASQKSI	49	
DB	7	LLLLLLGLPSAEARGPBRADKVPVQVARIIGRTVALQCPVEGDDPRLMTMTDGTI	66	
QY	50	QFHWKNSNQIKILNQGSFLTKGPKLNDRADSRSLMDQGNFPLITNKLIEDSDYIC	109	
DB	67	HSGW-----SRRFVLPQG-----LKVVEAEADAGVVC	95	
QY	110	EVEDQKEVQLVFLGTANSDPHLLQGSGLTLLESP--PGSS-----	150	
DB	96	KATNG-----FQSLSVNTLLIM--DDISPKESPGGSGGQEDPASQQWARRPT	146	
QY	151	-PSVOCR-----SPRGKNIQGGK-----TLASVQ	173	
DB	147	QPSKRRRVVIARPVGSSVRLKCVASGHRPRDIIIMMKDQTLTHLEASHRKKKKTLISKN	206	
QY	174	LELDGSGTWCTVVLONQKVE--FKIDIVLAFOKASSIVYKKGEQVESFPLAFTEVK	231	
DB	207	LKPEDSGKYTRVSNKAGAINATYKVDIORTSRKPLVTGTHPVVTVDFGATTSFOCK	265	
QY	232	LTSGGELMQWERAASSKSWITTFDLKKNKEVSKRTQDPKLOMGKRLYLHLTLFOALPOY	291	
DB	266	-----VRSQVK-----FVIQWLKRV-----EY	282	
QY	292	AGSGNLTALAEAKTGKTLQEVNLYVMRATOLQKULTCEVM-----GPTSPKIMLSKLENK	347	
DB	283	GSEGRHNSTIDVGQK-----FVLVLP-----TGVMRPRDGSYINKLLISRARD	327	
QY	348	EAKVSKREKPVWLVPEAKMQCLISDS--GQVLLSNIKVLPTWSTVER--KSCDKTH	403	
DB	328	-----DAGMYICLGANTMGVSFRSAFLTVLPDPRPGRPMASSVDKTH	371	
QY	404	TCPCPCPAPELLCGBSVFLPPPKPKDTLMIISTRTPEVTCVVDVSHEDPEVKMNYVDGVEV	463	
DB	372	TCPCPCPAPELLCGBSVFLPPPKPKDTLMIISTRTPEVTCVVDVSHEDPEVKMNYVDGVEV	431	
QY	464	HNATTKPEEYNSYTRVSVVLTVLHQMUNGKEKCYVSKKALPAPIEKTISRAGQPR	523	
DB	432	HNATTKPEEYNSYTRVSVVLTVLHQMUNGKEKCYVSKKALPAPIEKTISRAGQPR	491	
QY	524	EPQVYTLPPSDELTKQNVSLTCLVKGFPSPDIAVEMESNQEPENNYKTPRPVLDSDSF	583	
DB	492	EPQVYTLPPSDELTKQNVSLTCLVKGFPSPDIAVEMESNQEPENNYKTPRPVLDSDSF	551	
QY	584	FLYSKLTVDKSRWQGNVFGSCSVNHEALHNHYTQKSLSLSG	625	
DB	552	FLYSKLTVDKSRWQGNVFGSCSVNHEALHNHYTQKSLSLSG	593	

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1  TITLE OR INVENTION: Uses Thetecof
2  FILE REFERENCE: 99-513-P
3  CURRENT APPLICATION NUMBER: US/10/229,584
4  CURRENT FILING DATE: 2002-08-28
5  PRIOR APPLICATION NUMBER: 09/815,108
6  PRIOR FILING DATE: 2001-03-22
7  PRIOR APPLICATION NUMBER: 60/191,379
8  PRIOR FILING DATE: 2000-03-22
9  NUMBER OF SEQ ID NOS: 22
10 SOFTWARE: PatentIn Ver. 2.0
11 SEQ ID NO 22
12 LENGTH: 594
13 TYPE: PRT
14 ORGANISM: Artificial Sequence
15 FEATURE:
16 OTHER INFORMATION: Description of Artificial Sequence: murine rGFR-L
17 OTHER INFORMATION: extracellular domain-Fe fusion polypeptide
18 US-10-229-584-22

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[illegible]


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FILE REFERENCE: D0003NP
CURRENT APPLICATION NUMBER: US/09/910,600
CURRENT FILING DATE: 2001-07-20
PRIOR APPLICATION NUMBER: 60/220,139
PRIOR FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 32
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 16
LENGTH: 779
TYPE: PR
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: L3-hlg
US-09-910-600-16

Query Match      38.3%; Score 1306; DB 10; Length 779;
Best Local Similarity 46.0%; Pred. No. 3.4e-83;
Matches 308; Conservative 43; Mismatches 137; Indels 182; Gaps 18;

QY 8 RHLLVLQALPA--ATQGNKVL--GKKDTELTCTASQKSIQFMKNSNQIKILG 63
DB 239 RDLVISISDNTPALBPQGVNPLYBAQKGFRLLCADSGPATLSM----- 288
QY 64 NQGSFLTKGPSKLNDRADSRSLWDQGNFPLIINKLKIEDSTYICEVEDQ----- 114
DB 289 -----VLQNRVLSSHPWGPRLGLPLGVKAGDSGRYTCRAENRLGSGORALD 337
QY 115 -----KEEYQVLVF-----GLTANDTHLQOGSILTL--TLSPGSSPSVQCRS 157
DB 338 LSVQVPEPLRWVWSQANRTVLNGLNGTSLPVLBGQSLCYCVTHSSPPA----- 388
QY 158 PRGKNIOGGKTLVSQ-----LELDGSTMCTVLQNKKEFKIDIVLAFOK 206
DB 389 -RLSMTOGQVLSPSQSPDGVLELRVQVHEGEFTCHAR----- 428
QY 207 ASSIYKKEGEQVRSFPLAFVEKLTGSGELM-----WQERASSSKSWITFDL 256
DB 429 -----HPLGSGHVSLSLVHS-PKLLGPSCSWEAEGHCSGSSQASPAISRWWL---- 478
QY 257 KKEKESVAKVTDQPKLQMGKULPLHLTLPOALPOVAGS-GNLTALAEATGKLGHOEVLV 315
DB 479 -GEELLEGNSQDSF-----EYTPSSAGPWANSSLSLH---GGLSSGL--- 517
QY 316 VNRATQLOKMLTCEVWGPTSPKMLSLKLENKAKVSKREKPVWVLNPEAGMMQCLLSDS 375
DB 518 -----RLRCEAMNHGAQSGSILQLPDKKG-----LISDP 547
QY 376 GQVLESNIKVLPTWSTPVEPKSCDKTHTCPCPAPABELLGGPSVFLFPKPKDTLMISRT 435
DB 548 -----EPKSCDKTHTCPCPAPAFEGAPSVFLFPKPKDTLMISRT 588
QY 436 PEVTCVVVDVSHEDPEVKRMYVDGVEVHNAAKTRPEEQNSTYRVVSVLTVLHDQWNLG 495
DB 589 PEVTCVVVDVSHEDPEVKRMYVDGVEVHNAAKTRPEEQNSTYRVVSVLTVLHDQWNLG 648
QY 496 KEYKCKVSNKALPAPIEKTISAKAGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSD 555
DB 649 KEYKCKVSNKALPAPIEKTISAKAGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSD 708
QY 556 IAVEWESNGQPENNYKTTTPVLDSGSPFLYSKLTVDKSRWQGNVFCSVNHEALHNHY 615
DB 709 IAVEWESNGQPENNYKTTTPVLDSGSPFLYSKLTVDKSRWQGNVFCSVNHEALHNHY 768
QY 616 TOKSLSLSPG 625
DB 769 TOKSLSLSPG 778

RESULT 40
US-09-910-600-30
; Sequence 30, Application US/09910600
; Publication No. US2003003631A1
; GENERAL INFORMATION:
```

```
APPLICANT: Longphre, Malinda
APPLICANT: Chang, Han
APPLICANT: Whitney, Gena
TITLE OF INVENTION: NOVEL SIGLECS AND USES THEREOF
FILE REFERENCE: D0003NP
CURRENT APPLICATION NUMBER: US/09/910,600
CURRENT FILING DATE: 2001-07-20
PRIOR APPLICATION NUMBER: 60/220,139
PRIOR FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 32
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 30
LENGTH: 779
TYPE: PR
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: L3-hlg
US-09-910-600-30

Query Match      38.3%; Score 1306; DB 10; Length 779;
Best Local Similarity 46.0%; Pred. No. 3.4e-83;
Matches 308; Conservative 43; Mismatches 137; Indels 182; Gaps 18;

QY 8 RHLLVLQALPA--ATQGNKVL--GKKDTELTCTASQKSIQFMKNSNQIKILG 63
DB 239 RDLVISISDNTPALBPQGVNPLYBAQKGFRLLCADSGPATLSM----- 288
QY 64 NQGSFLTKGPSKLNDRADSRSLWDQGNFPLIINKLKIEDSTYICEVEDQ----- 114
DB 289 -----VLQNRVLSSHPWGPRLGLPLGVKAGDSGRYTCRAENRLGSGORALD 337
QY 115 -----KEEYQVLVF-----GLTANDTHLQOGSILTL--TLSPGSSPSVQCRS 157
DB 338 LSVQVPEPLRWVWSQANRTVLNGLNGTSLPVLBGQSLCYCVTHSSPPA----- 388
QY 158 PRGKNIOGGKTLVSQ-----LELDGSTMCTVLQNKKEFKIDIVLAFOK 206
DB 389 -RLSMTOGQVLSPSQSPDGVLELRVQVHEGEFTCHAR----- 428
QY 207 ASSIYKKEGEQVRSFPLAFVEKLTGSGELM-----WQERASSSKSWITFDL 256
DB 429 -----HPLGSGHVSLSLVHS-PKLLGPSCSWEAEGHCSGSSQASPAISRWWL---- 478
QY 257 KKEKESVAKVTDQPKLQMGKULPLHLTLPOALPOVAGS-GNLTALAEATGKLGHOEVLV 315
DB 479 -GEELLEGNSQDSF-----EYTPSSAGPWANSSLSLH---GGLSSGL--- 517
QY 316 VNRATQLOKMLTCEVWGPTSPKMLSLKLENKAKVSKREKPVWVLNPEAGMMQCLLSDS 375
DB 518 -----RLRCEAMNHGAQSGSILQLPDKKG-----LISDP 547
QY 376 GQVLESNIKVLPTWSTPVEPKSCDKTHTCPCPAPABELLGGPSVFLFPKPKDTLMISRT 435
DB 548 -----EPKSCDKTHTCPCPAPAFEGAPSVFLFPKPKDTLMISRT 588
QY 436 PEVTCVVVDVSHEDPEVKRMYVDGVEVHNAAKTRPEEQNSTYRVVSVLTVLHDQWNLG 495
DB 589 PEVTCVVVDVSHEDPEVKRMYVDGVEVHNAAKTRPEEQNSTYRVVSVLTVLHDQWNLG 648
QY 496 KEYKCKVSNKALPAPIEKTISAKAGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSD 555
DB 649 KEYKCKVSNKALPAPIEKTISAKAGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSD 708
QY 556 IAVEWESNGQPENNYKTTTPVLDSGSPFLYSKLTVDKSRWQGNVFCSVNHEALHNHY 615
DB 709 IAVEWESNGQPENNYKTTTPVLDSGSPFLYSKLTVDKSRWQGNVFCSVNHEALHNHY 768
QY 616 TOKSLSLSPG 625
DB 769 TOKSLSLSPG 778

RESULT 41
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US-10-412-406-32
; Sequence 32, Application US/10412406
; Publication No. US20040058394A1
; GENERAL INFORMATION:
; APPLICANT: BIOGEN, INC.
; APPLICANT: GARBER, Ellen
; APPLICANT: LYNE, Paul
; APPLICANT: SALDHANA, Jose W.
; TITLE OF INVENTION: HUMANIZED ANTI-LT-BETA-R ANTIBODIES
; FILE REFERENCE: BINA100CN
; CURRENT APPLICATION NUMBER: US/10/412,406
; CURRENT FILING DATE: 2003-04-10
; PRIOR APPLICATION NUMBER: 60/240,285
; PRIOR FILING DATE: 2000-10-13
; PRIOR APPLICATION NUMBER: 60/275,289
; PRIOR FILING DATE: 2001-03-13
; PRIOR APPLICATION NUMBER: 60/299,987
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: PCT/US01/32140
; PRIOR FILING DATE: 2001-10-12
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 32
; LENGTH: 663
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-412-406-32

Query Match      38.2%; Score 1304.5; DB 12; Length 663;
Best Local Similarity 48.7%; Pred. No. 3.5e-83;
Matches 305; Conservative 50; Mismatches 150; Indels 121; Gaps 19;

QY 33 KDDTVELTCTAQ--KKSIOFHKNSNOIKILGNOSFLTGPSTKLNDRASRSLMOG 90
DB 136 KSGTASVCLLNFPTPREAKVQKVDNALQ--SGNSQESVTEODSK-----DSTYSL----- 175
QY 91 NEPLIIKMLKIEDSDTYICEVEDQKEVQLVFGLTANSDDLHOGSILTLLES----- 145
DB 176 SSTLILSKADYDKKHVYACEVTHQ-----GLSSPTVTSFNNGECEVQLVESGGGLV 226
QY 146 PGGSSPSVOC-----RSPRKNIQGGKTLVSQLELDQSGTWT----- 183
DB 227 KPGGSLRLSCASGFTPSDYMYWFRQAPGKGLFWATIS-----DGGSTYYPDSVK 279
QY 164 --CTVLQNGKKEFEKIDIVLAFQKASIVYKKEGEQVFSPLAFTEKLTGSELWMQ 241
DB 280 GRTTISRDANKSLYLQSSSLRAED--TAVYICAREENGIFY-----FDYWGQ 326
QY 242 AERASSSKSWITFDLKNKEVSVKRYTQDPKLOMGKKLPLHLTLPOALPOYAGSNLTAL 301
DB 327 GTTVVSSA-----STKGPSTVFPLAPSKSTSGGTALGCLVKQYFPE-----PVTY 373
QY 302 EAKTGLKHOEVNL--VVMRATQLQKLTCEVWGPTSPKIMLSLKLKNEKAVSKREKPVW 359
DB 374 SWSNGALTSQVHTFAVLQSSGLY--SLSSVTVPPSS-----SLGTQTYICVNN--HKP-- 423
QY 360 VLNPRAGMNGQCLSDSGQVLESNTKYLPWTSTPVEPKSCDTHTCPCPPABELLGGPSV 419
DB 424 -----SNTKY-----DKKVEPKSCDTHTCPCPPABELLGGPSV 457
QY 420 FLFPPKPKDMLMSRTPEVTCVVVVDVSHEDPEVKFNMYVDGVEVNAKTKPREEOYNSTY 479
DB 458 FLFPPKPKDMLMSRTPEVTCVVVVDVSHEDPEVKFNMYVDGVEVNAKTKPREEOYNSTY 517
QY 480 RVVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTK 539
DB 518 RVVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTK 577
QY 540 NOVSLTCLVKGFPYPSDIAVEMESNGPENNKTTPPVLDSDGSFLLYSKLTVDKSRMOG 599
DB 578 NOVSLTCLVKGFPYPSDIAVEMESNGPENNKTTPPVLDSDGSFLLYSKLTVDKSRMOG 637
QY 600 NVFSCSVNHEALHNHYTQKSLSLSPG 625

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DB 638 NVFSCSVNHEALHNHYTQKSLSLSPG 663
|||||
RESULT 42
US-09-773-877A-14
; Sequence 14, Application US/09773877A
; Publication No. US20030017977A1
; GENERAL INFORMATION:
; APPLICANT: Xia, Yu-Ping et al.
; TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES
; FILE REFERENCE: REG 710B
; CURRENT APPLICATION NUMBER: US/09/773,877A
; CURRENT FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 14
; LENGTH: 557
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Filt(1-3 deltab) -Fc (Muc1)
US-09-773-877A-14

Query Match      38.2%; Score 1302.5; DB 12; Length 557;
Best Local Similarity 48.3%; Pred. No. 3.8e-83;
Matches 300; Conservative 55; Mismatches 119; Indels 147; Gaps 22;

QY 85 SLMDQGNFPLIIKMLKIEDSDTYICEVEDQKEVQLVFGLTANSDDLHOGSILTLTL 143
DB 3 SYMDTGVLCLALSLCLLTLTGSSSGSKLKDPE-----LSLKGTOHIMQAGTTLH-- 51
QY 144 ESPGSSPSVOC-----SPRGKNIQGGK-----TTSVQLE 175
DB 52 -----QCRGEAAHKNSLPEMWSKESRSLTITSACGRN--GKQFSTLTTLNTAQ 98
QY 176 LDQSGTCTVTL-----ONOKKVEFKIDI-----VLAFQKASIVYKKEGEVERSF 223
DB 99 ANHIGFSCVKLANPPTSKEKTESAIYIFISDGRPFVEMVSELPETIHMTEGR--ELVI 156
QY 224 PLATVEKLT-----GSGELMWQAEARASSKSWITFDLKNKEVSVKRYTQD 269
DB 157 PCRYTSSNITVTLTKKFLDITLIPDKRIIW-----DSRKQFIISNATYKEIGL----- 204
QY 270 PKLOMGKKLPLHLTLPOALPOYAGSNLTALAEKTKGL--HOEVNLV-----MRATQL 322
DB 205 -----LTCERTV-----NGHL-----YKTYLTHRQYNTIIDVOISTPRPVKL 242
QY 323 QKN-----LTCVWGPTSPKIMLS-----LKLKNEKAK-----VSKREKPVVNLNDEA 365
DB 243 LRGHTVLVNCATATPLNTRVQMTWSYPDELDQSHANIFYSVLTIDMQ-----NKDK 296
QY 366 GMMQCLSDSGQVLESNTIKY--LPTWSTPVEPKSCDTHTCPCPPABELLGGPSVFLFP 424
DB 297 GLYTCRVR--SGPSPKSVNTSVHIVDKAGPGRPKSCDTHTCPCPPABELLGGPSVFLFP 355
QY 425 KPKDMLMSRTPEVTCVVVVDVSHEDPEVKFNMYVDGVEVNAKTKPREEOYNSTYRVVSV 484
DB 356 KPKDMLMSRTPEVTCVVVVDVSHEDPEVKFNMYVDGVEVNAKTKPREEOYNSTYRVVSV 415
QY 485 LTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNOVSL 544
DB 416 LTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNOVSL 475
QY 545 TCLVKGFPYPSDIAVEMESNGPENNKTTPPVLDSDGSFLLYSKLTVDKSRMOGNNVSC 604
DB 476 TCLVKGFPYPSDIAVEMESNGPENNKTTPPVLDSDGSFLLYSKLTVDKSRMOGNNVSC 535
QY 605 SVMHEALHNHYTQKSLSLSPG 625
DB 536 SVMHEALHNHYTQKSLSLSPG 556

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RESULT 43
US-10-412-406-33
; Sequence 33, Application US/10412406
; Publication No. US20040058394A1
; GENERAL INFORMATION:
; APPLICANT: BIOGEN, INC.
; APPLICANT: GARBER, Ellen
; APPLICANT: LYNE, Paul
; APPLICANT: SALDHANA, Jose W.
; TITLE OF INVENTION: HUMANIZED ANTI-LT-BETA-R ANTIBODIES
; FILE REFERENCE: BINA100CN
; CURRENT APPLICATION NUMBER: US/10/412,406
; CURRENT FILING DATE: 2003-04-10
; PRIOR APPLICATION NUMBER: 60/240,285
; PRIOR FILING DATE: 2000-10-13
; PRIOR APPLICATION NUMBER: 60/275,289
; PRIOR FILING DATE: 2001-03-13
; PRIOR APPLICATION NUMBER: 60/299,987
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: PCT/US01/32140
; PRIOR FILING DATE: 2001-10-12
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: FastSeq for windows Version 4.0
; SEQ ID NO 33
; LENGTH: 4852
; TYPE: PR
; ORGANISM: Homo Sapien
US-10-412-406-33

Query Match      38.2%; Score 1302.5; DB 12; Length 4852;
Best Local Similarity 46.8%; Pred. No. 6,9e-82;
Matches 327; Conservative 53; Mismatches 185; Indels 133; Gaps 24;

QY      23  TCGNKKVVLGGKGTVELTCTASQKSIQFHWKNSNOIKLGNQSGFLYTGPSKLNDRADS 82
      4193  TOSPSLSASVSGRVTITCKAGQDIKSYLSWYQKP-----GKAPKLLIYATRLADGVPS 4248
      83  RSLMDQG-NFPLINKLKIEDSDTYIC-----EVEDQKEVQLVREGULA 127
      4249  RPSGSGSDTYITLTISLQEPDPTATYICLOHGESPTFGGKTLERKTVAAPSVF-IFP 4307
      128  NSDTHLLQCSQSLTLTLESPPGSSPVQCR-----SPGKNIO-----GGKTLVSQSL 174
      4308  PSEQQLKSG-----TASVVCILNNFYPREAVQWMDALQSGNSQSEVTEQ 4354
      175  ELQDSGTWCTVLOQNKVVEF---KIDIVVLAFOKASIVYK--KEGEVSEFSPLAFTV 229
      4355  DSKDS-TYSLSTLTLSKADYEKGKYACEVTHQGLSSPVTKSFNNGECEPEVOL-----V 4408
      230  EKLTC-----SGELMWQAEKASSKSWITFDLKNKEVSVKRVQDPKLOQNGKTLPLHLTP 285
      4409  EGGGGLVKKGGSL-----RUSCAASGFTF---SDYMWVFRQAP---GKGLEWVATIS 4455
      286  Q--ALPOYAGS--GNLTLLAEAKTGLHQBVLVWVRATOL-----QKN---LTCEWMP 333
      4456  DGSYTYTYDVSQKGRITISRDNAKNSLYLOMSLRAEDTAIVYCAAEENGNFYFPPYQWQ 4515
      334  TSPKMLSLKLENKE---AKVSKR-----EKPVV-----LNPEAGM 367
      4516  GTTVTVSSASTKCPSVFPLAPSSKSTSGTAAIGLVKDVPEPVTVSWNSGLTSGVHT 4575
      368  MGLLSDSGOVLLESINIKVLPWMS-----TVEPKSCDKTHTTCTP 407
      4576  FPAVLQSSSGLYSL--SSVVTVPSSSLGTQTYICNVNHNKPSNTKVDKKVEPKSCDKTHTTCTP 4634
      408  CPAPELLGGPSVFLFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKFNNYVQDGEVHNAAK 467
      4635  CPAPELLGGPSVFLFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKFNNYVQDGEVHNAAK 4694
      468  TKREFOYNSYTRVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOV 527
      4695  TKREFOYNSYTRVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOV 4754
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QY      528  YTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTTPVLDSDGSFFLYS 587
      4755  YTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTTPVLDSDGSFFLYS 4814
      588  KLTVDKSRWQOGNVPFSCVMHEALHNYTQKSLSPG 625
      4815  KLTVDKSRWQOGNVPFSCVMHEALHNYTQKSLSPG 4852

RESULT 44
US-09-875-338-5
; Sequence 5, Application US/09875338
; Patent No. US20020095024A1
; GENERAL INFORMATION:
; APPLICANT: MIKESELL, GLEN E.
; APPLICANT: CHANG, HAN
; APPLICANT: FINGER, JOSHUA N.
; APPLICANT: YANG, GUCHEN
; APPLICANT: LU, PIN
; APPLICANT: ZHOU, XIA-DI
; APPLICANT: PEACH, ROBERT
; TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
; FILE REFERENCE: 3053-4071US2
; CURRENT APPLICATION NUMBER: US/09/875,338
; PRIOR FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: 60/272,107
; PRIOR FILING DATE: 2001-02-28
; PRIOR APPLICATION NUMBER: 60/209,811
; PRIOR FILING DATE: 2000-06-06
; NUMBER OF SEQ ID NOS: 94
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
; LENGTH: 480
; TYPE: PR
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-875-338-5

Query Match      38.0%; Score 1298.5; DB 9; Length 480;
Best Local Similarity 62.7%; Pred. No. 5,9e-83;
Matches 282; Conservative 32; Mismatches 81; Indels 55; Gaps 16;

QY      219  VEFSPFLAFTVEKLTGSGEL--MWQAEKASSKSWITF-----DKNKEVSVK--RYTQ 268
      42  IECKFP-----VEKQDLAALIVYMEME---DKNIQFVHGEBDLKVQHSYRQARILK 93
      269  DPKLQMGKLLPLHLT-----LPQALPOYAGSG--NLTLALAEAKTGLHQBVLVWVR 318
      94  D-QLSLG--NAALQITDVKLQDAGVYRCMISYGADYKRITVKNVAPYKINQRI-LVVDP 150
      319  ATOLQKNLTCEYWG--PTSPKMLSLKLENKEAKV---SKREKPVW-----VLNPEAG 366
      151  VTS--EHELTQAEKGFPAEVLWTSSDHQVLSGKTTTMSKREBKLPNTSTLRITTTNE 209
      367  MWQCL--LSDSGOVLLESNIKVLP-----TWSTVEPKSCDKTHTTCTPCEPAPELLG 415
      210  IFYCTFRRLDPEENHTALVILPELPAHPNERTRGDDEEPKSCDKTHTTCTPCEPAPELLG 269
      416  GRSVTLFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKFNNYVQDGEVHNAAKTKREFOY 475
      270  GRSVTLFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKFNNYVQDGEVHNAAKTKREFOY 329
      476  NSTYVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOVYTLTPSRD 535
      330  NSTYVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOVYTLTPSRD 389
      536  ELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR 595
      390  ELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSR 449
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Qy 622 LSPG 625
DB 447 LSPG 450

RESULT 47

US-10-077-023-17
Sequence 17, Application US/10077023
Publication No. US20030031675A1
GENERAL INFORMATION:
APPLICANT: MIRESEL, GLEN E.
APPLICANT: CHANG, HAN
APPLICANT: FINGER, JOSHUA N.
APPLICANT: YANG, GUICHEN
APPLICANT: LU, PIN
APPLICANT: ZHOU, XIA-DI
APPLICANT: PEACH, ROBERT
TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
FILE REFERENCE: 3053-4071US3
CURRENT APPLICATION NUMBER: US/10/077,023
PRIOR FILING DATE: 2002-02-15
PRIOR APPLICATION NUMBER: 60/272,107
PRIOR FILING DATE: 2001-02-28
PRIOR APPLICATION NUMBER: 60/209,811
PRIOR FILING DATE: 2000-06-06
NUMBER OF SEQ ID NOS: 138
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 17
LENGTH: 451
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-10-077-023-17

Query Match 37.9%; Score 1294.5; DB 14; Length 451;
Best Local Similarity 51.5%; Pred. No. 1e-82; Indels 139; Gaps 15;
Matches 280; Conservative 48; Mismatches 77;

Qy 117 EVOL-----LVFGILANSPTHLQ-GSLTLTLSPSSPSVQCSPPKKNIO----- 164
DB 11 ELQHLQIALFTYTVKEKELIIEHSGNVLTLECNFDGSHVNLGATIASIQKENDTSPIR 70
Qy 165 -----GGKTLVSQLELDSDGTWCTVLO---NOKKVEFKIDIVLAFQKAS 208
DB 71 ERATLLEBOLPLGKASFHLPQVGRDEGQYCCIIYGVAMDYKYLTLK---VKASYRKIN 127
Qy 209 SIYVK-KEGEQVEFS-----FLAFTVEKLTGSGELMWAERASSKSWITPDLKKEVS 262
DB 128 THILKPEDEVELTQATGYPLA-----EVSW-----PNVS 159
Qy 263 VKRVTQDPKLOMGKCLPLHLTLPOALPOYAGSGNLTALAEAKTGKLGQEVNLVWRATOL 322
DB 160 VEAANS-----HSRTPEGLYQVTS---VLRLKPPPG----- 187
Qy 323 QKALTCFVGPTSPKML-SLKLENKAYSKREKPVWVLANPEAGMOCCLSDSQVILE 381
DB 188 -NPFSCVWNVTYRELTLASIDLSQ-----MEPR----- 216
Qy 382 SNIKVLPMTSTVEPEKCDKHTTCCPCPAPELLGGSVLFPKPKDTIMISRTPEVTCV 441
DB 217 -----TEPEPSCDKHTTCCPCPAPELLGGSVLFPKPKDTIMISRTPEVTCV 266
Qy 442 VVDVSHEDPEVKFNWYVDGEVHNAAKTKPREQYNSTYRVSVLTVLHODMNLNGEKYCK 501
DB 267 VVDVSHEDPEVKFNWYVDGEVHNAAKTKPREQYNSTYRVSVLTVLHODMNLNGEKYCK 326
Qy 502 VSNKALPAPIETKTSIAKQOPREPOVYTLPSRDELTKNOVSLTCLVKGFPYSDIAVEME 561
DB 327 VSNKALPAPIETKTSIAKQOPREPOVYTLPSRDELTKNOVSLTCLVKGFPYSDIAVEME 386

Qy 562 SNGQPENNYKTTTPVYLDSDGSFFLYSKLTVDKSRWQGNVFCSCVMHBAHNNHYTKSL 621
DB 387 SNGQPENNYKTTTPVYLDSDGSFFLYSKLTVDKSRWQGNVFCSCVMHBAHNNHYTKSL 446

Qy 622 LSPG 625
DB 447 LSPG 450

RESULT 48

US-10-404-724-8
Sequence 8, Application US/10404724
Publication No. US20030203447A1
GENERAL INFORMATION:
APPLICANT: Horwitz, Arnold H.
TITLE OF INVENTION: Methods and Materials For Increasing Expression of Recombinant
FILE REFERENCE: 13698US01
CURRENT APPLICATION NUMBER: US/10/404,724
CURRENT FILING DATE: 2003-03-31
PRIOR APPLICATION NUMBER: US 60/368,530
PRIOR FILING DATE: 2002-03-29
NUMBER OF SEQ ID NOS: 79
SOFTWARE: PatentIn version 3.2
SEQ ID NO 8
LENGTH: 465
TYPE: PRT
ORGANISM: Homo Sapiens
US-10-404-724-8

Query Match 37.9%; Score 1294.5; DB 12; Length 465;
Best Local Similarity 47.7%; Pred. No. 1.1e-82;
Matches 304; Conservative 31; Mismatches 101; Indels 201; Gaps 17;

Qy 11 LVLVQLALLPATQGNKVVLG---KKGDYVELTCTASQKSIOPHWRNSNQIKILGNQ 66
DB 7 LFLFLMAAQAQAQIQLVQSGBELKKPGETVKSCKAS---GYFTKYGMWVWQAPEGK 63
Qy 67 -----SPLTKGSPKLNDRADSRSLMDQGNP-----LIIKNLKIENSDTYI 108
DB 64 LKMWGINTYTBEPYVGD-----FKGRFAFSLTSASTANLQINNLSKSEDTATYF 114
Qy 109 CEVEDQKEVQLVVLGLANSDTHLQGS.LTLTLESPGASPSVQCSPPKKNIOGKT 168
DB 115 C-----ARFGSAVD---YWGQGTSTVSSASTGSPVFLPAPSSKSTSG-T 157
Qy 169 LVSQLELDSDGTWCTVLOKQKVEFKIDIVLAFQKASSIVYKKEGEQVEFSPLAFT 228
DB 158 AALGCL-----VKDYFPEEVT 173
Qy 229 VEKLTGSGELMWAERASSKSWITPDLKKEVSVKRVTPDKLOMGKCLPLHLTLPOAL 288
DB 174 VS-----WNSGALTSG-----VH-TFPAYL 192
Qy 289 POYAGSGNLTALAEAKTGKLGQEVNLVWRATOLQKXLTCEVWGPTSPKMLSLKENKE 348
DB 193 -OSSGLYSLSVVYPPSSSLGTQTYI-----CNV----- 220
Qy 349 AKVSKREKPVWVLANPEAGMOCCLSDSQVLLSNIKYLPMWSTFVEBKSCDKHTTCCPC 408
DB 221 -----NHKP-----SNTKV-----DKRVEPKSCDKHTTCCPC 247
Qy 409 PABELLGGPSVFLFPKPKDTIMISRTPEVTCVVDVSHEDPEVKFNWYVDGEVHNAAK 468
DB 248 PABELLGGPSVFLFPKPKDTIMISRTPEVTCVVDVSHEDPEVKFNWYVDGEVHNAAK 307
Qy 469 KPREQYNSTYRVSVLTVLHODMNLNGEKYCKSNKALPAPIETKTSIAKQOPREPOVY 528
DB 308 KPREQYNSTYRVSVLTVLHODMNLNGEKYCKSNKALPAPIETKTSIAKQOPREPOVY 367
Qy 529 TLPSRDELTKNOVSLTCLVKGFPYSDIAVEMESNGQPENNYKTTTPVYLDSDGSFFLYSK 588
DB 368 TLPSRDELTKNOVSLTCLVKGFPYSDIAVEMESNGQPENNYKTTTPVYLDSDGSFFLYSK 427

Qy 589 LTVDSRWQOQGVFSCSVMHKALHNHYTOKSLSPG 625
 Db 428 LTVDSRWQOQGVFSCSVMHKALHNHYTOKSLSPG 464

RESULT 49
 US-10-120-198B-2
 ; Sequence 2, Application US/10120198B
 ; Publication No. US20030215427A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Jensen, Michael
 ; TITLE OF INVENTION: CEF-SPECIFIC REDIRECTED IMMUNE CELLS
 ; FILE REFERENCE: 1954-337
 ; CURRENT APPLICATION NUMBER: US/10/120,198B
 ; CURRENT FILING DATE: 2002-04-11
 ; PRIOR APPLICATION NUMBER: 60/282,859
 ; PRIOR FILING DATE: 2001-04-11
 ; NUMBER OF SEQ ID NOS: 11
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 2
 ; LENGTH: 631
 ; TYPE: PRT
 ; ORGANISM: artificial sequence
 ; FEATURE:
 ; OTHER INFORMATION: mouse-human chimera
 US-10-120-198B-2

Query Match 37.9%; Score 1294.5; DB 15; Length 631;
 Best Local Similarity 46.5%; Pred. No. 1.6e-82;
 Matches 301; Conservative 46; Mismatches 111; Indels 169; Gaps 19;

Qy 5 VPRHLVLVLAALPAATGKVKVGGKDPVELTCTASQKSIQF--HM--KNSQI 59
 Db 13 LPHRFLIPVQLOQPAE-----LVKPGASVLSCLASGTFPGYMMHWKQRPBGIL 67
 Qy 60 KILNQSGFLTKGPKLNDRAISRSLW-DQGNFP-LIKNLKIEDSDTYICEVEDQKE 116
 Db 68 EWIGRINP--SNGRITNERFESKATLTVDKSSTTAFMQLSGLTSEDSAVYFCARD----- 121
 Qy 117 EVQVLVPLTANSDPHLQGGSLTTLTSPSSSVQCRSPKNGIOGKTLVSQ--- 173
 Db 122 ----YGTSTYFND--YMGQGTTLTVSSGGGSGG-----GSGGGGSDIQWTOSSS 166
 Qy 174 ---LELDQSGTWTCTVLQONQKVEFKIDIVLAFQKASSIYKKEGEVSEFPLATVE 230
 Db 167 SFSVSLGRTVITC-----KANEI----- 186
 Qy 231 KLTGSGELWQAEKSSSKSWITFDLKNKEVSVKRVTDOPKLQMGKPLHLTLPLQALPQ 290
 Db 187 ---NNRLAWYQOTPGNS-----PRLLISGATNLVTGVPS---R 218
 Qy 291 YAGSNLTLALEAKTGKHLQEVNVLVWRAIOLQKNTLCEWGPSTPKMLSLKLENKAK 350
 Db 219 FSGSG-----SGKDY-----TLTITSLQAE----- 238
 Qy 351 VSKREKPVWVLPBAGMQCLSDSGQVLLSNIKVLPTWSTP-----VEEKS 398
 Db 239 -----DATYYC-----QQYMTPTPTFGSGTELEIKVEKXS 269
 Qy 399 CDKHTTCCPPAPBELLGGPSVFLPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFMY 458
 Db 270 SDKHTTCCPPAPBELLGGPSVFLPPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFMY 329
 Qy 459 DGVENHNKTKPREQVNSTYRVSVLTVLHODMANGKCYCKVSNKALPAPIEKTISK 518
 Db 330 DGVENHNKTKPREQVNSTYRVSVLTVLHODMANGKCYCKVSNKALPAPIEKTISK 389
 Qy 519 KGQPREPOVYTLPRDELTKNOVSLTCLVKGIFYSDIAYEWESGQENNYKTPPVLD 578
 Db 390 KGQPREPOVYTLPRDELTKNOVSLTCLVKGIFYSDIAYEWESGQENNYKTPPVLD 449
 Qy 579 SDGSFFLYSKLTVDSRWQOQGVFSCSVMHKALHNHYTOKSLSPG 625

Db 450 SDGSFFLYSKLTVDSRWQOQGVFSCSVMHKALHNHYTOKSLSPG 496

RESULT 50
 US-10-207-655-240
 ; Sequence 240, Application US/10207655
 ; Publication No. US20030118592A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Ledbetter, Jeffrey A.
 ; APPLICANT: Hayden-Ledbetter, Martha S.
 ; TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
 ; FILE REFERENCE: 390069.401C1
 ; CURRENT APPLICATION NUMBER: US/10/207,655
 ; CURRENT FILING DATE: 2002-07-25
 ; NUMBER OF SEQ ID NOS: 426
 ; SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 240
 ; LENGTH: 500
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: fusion polypeptide
 US-10-207-655-240

Query Match 37.9%; Score 1293; DB 14; Length 500;
 Best Local Similarity 49.0%; Pred. No. 1.5e-82;
 Matches 300; Conservative 37; Mismatches 127; Indels 148; Gaps 18;

Qy 23 TQGNKVVLGKKGDVELTCTASQKSIQFHWKNSNQIKIINGQSGFLTKGPKLNDRAIS 82
 Db 27 SQSPAILASPGKEKVTWTCRASSVS--YMHWYQKP-----QMSFPPTF--GAGTKL 81
 Qy 83 RSLMDQ--NPRILIKNLKIEDSDTYICEVEDQKEVQVLVFGLTANSDPHLQGGSLTL 141
 Db 82 RFGSGGSGTSLTISVEAEDATYYCQ-----QMSFPPTF--GAGTKL 125
 Qy 142 TLESPPSSSVQCRSPKNGIOGKTLVSQLELDQSGTWTCTVLQONQKVEFKIDIV 201
 Db 126 ELKQGGSG-----GGSGGGGS--SQAVLQSGA-----ELV- 156
 Qy 202 LAFQKASSIYKKEGEVSEFPLATVEKLTG---SGELWQAEKSSSKSWITFDL 257
 Db 157 -----REGASVKNWSC-----KASGYTFTSYNNHWKQTPRQGLEWIG--- 193
 Qy 258 NKEVSVKRVTDOPKLQMGKPLHLTLPLQALPOYAGSGNLTALAEATGKHLQEVNVLV 317
 Db 194 -----AIPKNGDTSYNQKFK-GK----- 211
 Qy 318 RATQLOKNTLCEWGPSTPKMLSLKLENK-----AKVSKREKPVWVLPBAGMQCLLS 373
 Db 212 -----ATLTVDKSSSTAYVQLSLTSEDSAVYCAVVVSYNSYWFND---VM----- 256
 Qy 374 DSGQVLLSNIKVLPTWSTPEPKSCDKHTTCCPPAPBELLGGPSVFLPPPKPKDTLMIS 433
 Db 257 GTGTTV-----TVSSDQEPKSCDKHTTCCPPAPBELLGGPSVFLPPPKPKDTLMIS 307
 Qy 434 RTEPVTGVVVDVSHEDPEVKFMYVVDGVEVNAKTKREBOYNSTYRVSVLTVLHODML 493
 Db 308 RTEPVTGVVVDVSHEDPEVKFMYVVDGVEVNAKTKREBOYNSTYRVSVLTVLHODML 367
 Qy 494 NGKEYKCKVSNKALPAPIEKTISKAKQPREPQVYTLPPSDELTKNOVSLTCLVKGIFY 553
 Db 368 NGKEYKCKVSNKALPAPIEKTISKAKQPREPQVYTLPPSDELTKNOVSLTCLVKGIFY 427
 Qy 554 SDIAYEWESGQENNYKTPPVLDSDGSFFLYSKLTVDSRWQOQGVFSCSVMHKALHN 613
 Db 428 SDIAYEWESGQENNYKTPPVLDSDGSFFLYSKLTVDSRWQOQGVFSCSVMHKALHN 487
 Qy 614 HYTOKSLSPG 625
 Db 488 HYTOKSLSPG 499

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RESULT 51
US-09-875-338-9
/ Sequence 9, Application US/09875338
/ Patent No. US20020095024A1
/ GENERAL INFORMATION:
/ APPLICANT: MIKESELL, GLEN E.
/ APPLICANT: CHANG, HAN
/ APPLICANT: FINGER, JOSHUA N.
/ APPLICANT: YANG, GUOCHEN
/ APPLICANT: LU, PIN
/ APPLICANT: ZHOU, XIA-DI
/ APPLICANT: BEACH, ROBERT
/ TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
/ FILE REFERENCE: 3053-4071US2
/ CURRENT APPLICATION NUMBER: US/09/875,338
/ CURRENT FILING DATE: 2001-06-06
/ PRIOR APPLICATION NUMBER: 60/272,107
/ PRIOR FILING DATE: 2001-02-28
/ PRIOR APPLICATION NUMBER: 60/209,811
/ PRIOR FILING DATE: 2000-06-06
/ NUMBER OF SEQ ID NOS: 94
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 9
/ LENGTH: 698
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-875-338-9

Query Match      37.9%; Score 1293; DB 9; Length 698;
Best Local Similarity 44.7%; Pred. No. 2,4e-82;
Matches 296; Conservative 56; Mismatches 122; Indels 188; Gaps 19;

QY 32 KKGDTVELTCTASQ-KKSIQFHWKNSNQIKILGNQGSFLTKGSKLNDRAISRSLMDG 90
DB 156 RRGDTVTTCSSYQGYPEAEVFWQDGGVPLTGN-----VTTSQMANEGG 200
QY 91 NFPL-IINKLKIEDSDTYICEVEDQEEVQLVFGLTANSPTHLQSGSLTTLTLESPP-- 147
DB 201 LFDVHSILRVLGANGTSC-----LVRNVLQGDH-----SSVTITPQSRPFG 245
QY 148 -----GSSPSVQCR-SP-----RGKN-- 162
DB 246 AVEVQVEDPVVALVGTDTATLRCSFSPERGSLAQNLIMQLTDTKQLVHSFTGRDQGS 305
QY 163 -----IOGKTLVSQLELDOSGTWTCV-LQNKKEVFKIDIVVLAFOKAS 208
DB 306 AVANRTALFPDLLAQGNASLRQVRVADSGFTCVSIRDFGSAVNSIQVAAPYSKPSM 365
QY 209 SIYVYKKE---GEQVEFSPLAFTVEKLTG--SGELMWOAERASSSKSWITFDLKNKEVS 263
DB 366 TLEPNKDLARPGTV-----TITCSSYRGYPEAEVFWQD----- 398
QY 264 KRVTDPKLQMGKCLPLHLTLFQALPOYAGSGNLTLALBAKTGKLHQBENVLVMMRATQLO 323
DB 399 -----GQGVPL-----TGNVTTSQMANEGGLE-DVHSVLRVVLGAN 433
QY 324 KNLTCVGMGPTSPKMLSLKLENKEAKVSKREKPVVNLNPEAGMOCCLSDSGQVLTLEEN 383
DB 434 GTYSCLVARNP-----VLQODA-----HGSVTTTQO 458
QY 384 IKVLPWSTPVEBKSCDKHTPCPCAPPELLGSPVFLFPKPKDTLMTSRPEVTCVV 443
DB 459 PMTFP---PEPEKSKDKHTPCPCAPPELLGSPVFLFPKPKDTLMTSRPEVTCVV 515
QY 444 DVSHEDPEVKFNKYVDGVEVHNNAKTYPRBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKV 503
DB 516 DVSHEDPEVKFNKYVDGVEVHNNAKTYPRBEQYNSTYRVVSVLTVLHQDWLNGKEYKCKV 575
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QY 504 NKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAEVESN 563
DB 576 NKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAEVESN 635
QY 564 GQPNYYKTTTPVLVDSGSSFLYSLKTVDKSRWQGNVFSCVMEHALNHRYTQSLIS 623
DB 636 GQPNYYKTTTPVLVDSGSSFLYSLKTVDKSRWQGNVFSCVMEHALNHRYTQSLIS 695
QY 624 PG 625
DB 696 PG 697

RESULT 52
US-10-077-023-9
/ Sequence 9, Application US/10077023
/ Publication No. US20030031675A1
/ GENERAL INFORMATION:
/ APPLICANT: MIKESELL, GLEN E.
/ APPLICANT: CHANG, HAN
/ APPLICANT: FINGER, JOSHUA N.
/ APPLICANT: YANG, GUOCHEN
/ APPLICANT: LU, PIN
/ APPLICANT: ZHOU, XIA-DI
/ APPLICANT: BEACH, ROBERT
/ TITLE OF INVENTION: B7-RELATED NUCLEIC ACIDS AND POLYPEPTIDES USEFUL FOR
/ FILE REFERENCE: 3053-4071US3
/ CURRENT APPLICATION NUMBER: US/10/077,023
/ CURRENT FILING DATE: 2002-02-15
/ PRIOR APPLICATION NUMBER: 60/272,107
/ PRIOR FILING DATE: 2001-02-28
/ PRIOR APPLICATION NUMBER: 60/209,811
/ PRIOR FILING DATE: 2000-06-06
/ NUMBER OF SEQ ID NOS: 138
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 9
/ LENGTH: 698
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-10-077-023-9

Query Match      37.9%; Score 1293; DB 14; Length 698;
Best Local Similarity 44.7%; Pred. No. 2,4e-82;
Matches 296; Conservative 56; Mismatches 122; Indels 188; Gaps 19;

QY 32 KKGDTVELTCTASQ-KKSIQFHWKNSNQIKILGNQGSFLTKGSKLNDRAISRSLMDG 90
DB 156 RRGDTVTTCSSYQGYPEAEVFWQDGGVPLTGN-----VTTSQMANEGG 200
QY 91 NFPL-IINKLKIEDSDTYICEVEDQEEVQLVFGLTANSPTHLQSGSLTTLTLESPP-- 147
DB 201 LFDVHSILRVLGANGTSC-----LVRNVLQGDH-----SSVTITPQSRPFG 245
QY 148 -----GSSPSVQCR-SP-----RGKN-- 162
DB 246 AVEVQVEDPVVALVGTDTATLRCSFSPERGSLAQNLIMQLTDTKQLVHSFTGRDQGS 305
QY 163 -----IOGKTLVSQLELDOSGTWTCV-LQNKKEVFKIDIVVLAFOKAS 208
DB 306 AVANRTALFPDLLAQGNASLRQVRVADSGFTCVSIRDFGSAVNSIQVAAPYSKPSM 365
QY 209 SIYVYKKE---GEQVEFSPLAFTVEKLTG--SGELMWOAERASSSKSWITFDLKNKEVS 263
DB 366 TLEPNKDLARPGTV-----TITCSSYRGYPEAEVFWQD----- 398
QY 264 KRVTDPKLQMGKCLPLHLTLFQALPOYAGSGNLTLALBAKTGKLHQBENVLVMMRATQLO 323
DB 399 -----GQGVPL-----TGNVTTSQMANEGGLE-DVHSVLRVVLGAN 433
```

Oy		32	KXNLCFVWGTSPKMLSLSTLENKAUVSKREKPVWLINPAGMOCILSDSGVLLESN	383
Dd		434	GTYSCIVARN-----VLQDA-----HGSYITGQ	458
Oy		384	IKVLPWTSTVEBKSCDKHTHTCPRCAPARELLGGPSVELPRPKXDITLISKTPEVTCVV	443
Dd		459	PMTFP---PEFEFKSCDKHTHTCPCAPARELLGGPSVFLEPRKXDITLISKTPEVTCVV	515
Oy		444	DVSHEDPEVFNMYVDGVENNAKKTPREDOYNSTRVVSUTLVLDHOMLNGKEYCKVS	503
Dd		516	DVSHEDPEVFNMYVDGVENNAKKTPREDOYNSTRVVSUTLVLDHOMLNGKEYCKVS	575
Oy		504	NKALLPAIEKTIISKAKGRPREPOVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMESN	563
Dd		576	NKALLPAIEKTIISKAKGRPREPOVYTLPPSRBELTKNOVSLTCLVKGFYPSDIAVEMESN	635
Oy		564	GQPENNYKTTTPVILDSDGSFFLYSKLTVDKSPMOOGANFSCSVNHAILHHNYTKSLSLS	623
Dd		636	GQPENNYKTTTPVILDSDGSFFLYSKLTVDKSMOOGANFSCSVNHAILHHNYTKSLSLS	695
Oy		624	PG 625	
Dd		696	PG 697	

```

RESULT 53
US-10-683-255-2
; Sequence 2, Application US/10683255
; Publication No. US20040063910A1
; GENERAL INFORMATION:
; APPLICANT: Kavanaugh, William M.
; APPLICANT: Ballinger, Marcus
; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
; TITLE OF INVENTION: RECEPTOR-IMMUNOGLOBULIN FUSION
; FILE REFERENCE: PP01474.101
; CURRENT APPLICATION NUMBER: US/10/683,255
; CURRENT FILING DATE: 2003-10-10
; PRIOR APPLICATION NUMBER: 09/499,846
; PRIOR FILING DATE: 2000-02-07
; PRIOR APPLICATION NUMBER: 60/119,002
; PRIOR FILING DATE: 1999-02-08
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 622
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-683-255-2

```

	Query Match	37.8%	Score 1292	DB 13	Length 622
	Best Local Similarity	49.4%	Pred. No 2	4e-82	
	Matches 304	Conservative 47	Mismatches 117	Indels 148	Gaps 22
Oy	109	CEVEDOKEEVQLIVFGL-TANSDTHLLOQSITLTLESPPGSSPVQC--RSPRGK----	161		
Db	55	CRLRDVQVSINIMLRDVOALAESNRIRITGEEVEVG-DVDPADSGIYCVTSSPGSDDTTY	113		
Oy	162	---NIQGKLTVSQLELDQSGT-----WACTYLONOKVFETIDVLV	202		
Db	114	FSTNVVDALPSSDDDDDDSSSEKETDNTPKNVAIYW----SPECIEKKLNAV--	166		
Oy	203	AFQKASSIYYKKEGEVEFPFLATFVE-KLTGSGELMWQERASSSKSWTFDLKN-KE	260		
Db	167	-----PAAKTKVKKCPSSG-----TNPTLRW-----LNKGKE	194		
Oy	261	VSVKRVTDPKLQMGG---KKLPMLHTPEOALPOYAGSGNTLLALEATGKHLHOENVL-V	315		
Db	195	FK-----PDHRIGGYKVRYATWTSLINDSVVP--SDKGNATCIYENBYGSINHITYLDV	245		
Oy	316	VMRATO---LQKLV-----TCVEWGFTSPKMLSLKLF-----	345		
Db	246	VEESPHRPILIQACLPRNKTVALGNSVNEFWCKYSDPQHIOMLKHIEVNGSKIQPDLNIPY	305		

QY	346	----	KKEAVYSRREKPVWVLT	-----	PRAGMOCCLSSP	-----	375
Db	306	VQILKTAGVNTT	DDKMEVTLHRLNVS	FEBAGETTCLAGNS	IGLSHHSAMVLT	LEALEERPA	365
QY	376	---	GOVLTESNIKVLPTWS	-TP-	VEPRSCDKTHTCP	PCPABELLGGPSVFLPRPKKOT	429
Db	366	WMTSP	PLYLESRGGLVPRGSGSP	GOEPKSCDXTHTCP	PCPABELLGGPSVFLPRPKKOT		425
QY	430	LMISRTPEVTCV	VVVDSHEDPEVKFNW	VYDGEVNAKTKP	REEOVNSITRYVVS	VLTVDL	489
Db	426	LMISRTPEVTCV	VVVDSHEDPEVKFNW	VYDGEVNAKTKP	REEOVNSITRYVVS	VLTVDL	485
QY	490	ODMLNGKEYKCKKVS	NKALPAPI	EKTI	SKAKGQPRE	POYTLTPPS	SDELTKNOVSLTCLVK 549
Db	486	QDMWNGKEYKCKKVS	NKALPAPI	EKTI	SKAKGQPRE	POYTLTPPS	SDELTKNOVSLTCLVK 545
QY	550	GFYPSDILAVES	NSQPENNYKTTPE	PVLDSDGS	FLYISKLTYDKSR	MOQGNFVSCVHME	609
Db	546	GFYPSDILAVES	NSQPENNYKTTPE	PVLDSDGS	FLYISKLTYDKSR	MOQGNFVSCVHME	605
QY	610	ALAHNHYTQKSL	SLSPG	625			
Db	606	ALAHNHYTQKSL	SLSPG	621			

```

RESULT 54
US-10-679-620-64
; Sequence 64, Application US/106796620
; Publication NO. US20040110930A1
; GENERAL INFORMATION:
; APPLICANT: Large Scale Biology
; APPLICANT: Reiml, Stephen J.
; APPLICANT: Edwards, Patricia C.
; TITLE OF INVENTION: MULTIMERIC PROTEIN ENGINEERING
; FILE REFERENCE: 34150-004A
; CURRENT APPLICATION NUMBER: US/10/679,620
; CURRENT FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/415,940
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 122
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 64
; LENGTH: 713
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: p9E10chimericv2-1, see Example 15
US-10-679-620-64

```

Query Match	37.8%	Score 1292;	DB 16;	Length 713;
Best local similarity	46.3%	Pred. No. 2,9e+82;		
Matches	310;	Conservative	51;	Mismatches 145; Indels 164; Gaps 21
Qy	33	KGDVETLTCTASQ--KKSIOFHMKNSNOIKILNGQGSFLTKGPSKLNDRADRSRLIMDQG	90	
Db	130	KSGTASVVCLLNNFPYPRFAKQVMKQDNALQ--SGNSQESVETEDSDK---DSTYSI----	179	
Qy	91	NFPLIKKLIKIEDSDPYICEVEDQKEEVQLLVFGLTANSDFLLQGOSSLTTLSPGSS	150	
Db	180	SSTLLSGADYDKKRYVACEV-----TH--GGLS-----	206	
Qy	151	PSVOCRSPGRKNIOQGKTLVSQLELDQSGTWTCTVLONQKKVEFKIDIVLAFQ----	205	
Db	207	-----SPVTSKFNKGE--CSLSKRIIDPSAT-----DIVDGAELHRDD	243	
Qy	206	--KASSIYKKEGEQVEFSPFLAFVFKLTGSGELMQAERASSSKSWITFDLKNKEVS	263	
Db	244	PPPLASDGLKRGGE-----VDLVESGDLVYKCGSKLSCAAGCFPSHHGMSM	292	
Qy	264	KRVTDPELQ---MGKLLPLHLTPQALPQYASGNLTLLAEATGKGLHQBENVLVYMR	319	
Db	293	VRQPPDKLLEWATIGSR--GTYTHYPSDV-----KGRFLISDNDKNALVYLMNLSKSD	346	

Oy	320	YOLQKNLTC-----	-----	EWGGRPSRLMLSLKLENKE-----	AVSRR-----	354
Db	347	TAM--YYCARNSEFYTYGNTYYTYSAMDWMGOGASTVSASTGSGSVFPLAFSSSTSG				403
Oy	355	-----	-----	-----	-----	391
Db	404	GTAALGCLVQYFPEVTVYVSNMSGALITSGVHFPFPAVLGSGLYSL--SVVTVFSSSLGQ				462
Oy	392	-----	-----	-----	-----	435
Db	463	TYICNVNHNKPSMTKYDKRVEPKSCDHTHCPCPCABELLGSPVFLFPPKPKDTLMI	SRT			522
Oy	436	PEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTKPRREQYNSYRVASVLTVLHQMVLNG				495
Db	523	PEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTKPRREQYNSYRVASVLTVLHQMVLNG				582
Oy	496	KEYCKCKVSNKALPAPIEKTIISKAKGQPRPEQVYTLPPSRDELTKNOVSLTCLVKGFPSPD				555
Db	583	KEYCKCKVSNKALPAPIEKTIISKAKGQPRPEQVYTLPPSRDELTKNOVSLTCLVKGFPSPD				642
Oy	556	IAVENESNQCPENNYYKTTPLVLDSDGSFFLYSKLTVDKSRMOQGNVFCSCVMHEALAHNH				615
Db	643	IAVENESNQCPENNYYKTTPLVLDSDGSFFLYSKLTVDKSRMOQGNVFCSCVMHEALAHNH				702
Oy	616	YOKSLSLSPG	625			
Db	703	YOKSLSLSPG	712			

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RESULT 55
US-10-679-620-62
; Sequence 62, Application US/10679620
; Publication NO. US20040110930A1
; GENERAL INFORMATION:
; APPLICANT: Large Scale Biology
; APPLICANT: Reini, Stephen J.
; APPLICANT: Edwards, Patricia C.
; TITLE OF INVENTION: MULTIMERIC PROTEIN ENGINEERING
; FILE REFERENCE: 34150-004A
; CURRENT APPLICATION NUMBER: US/10/679,620
; CURRENT FILING DATE: 2003-10-03
; PRIOR APPLICATION NUMBER: 60/415,940
; PRIOR FILING DATE: 2002-10-03
; NUMBER OF SEQ ID NOS: 122
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 62
; LENGTH: 715
; TYPE: prt
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: p9E10chimericv1-1, see Example 15
US-10-679-620-62

```

Query Match	37.8%	Score 1292	DB 16	Length 715
Best Local Similarity	48.1%	Pred. No. 2.9e-82		
Matches	293	Conservative	36	Mismatches 104, Indels 176, Gaps 15

QY	30	LGKKGDYVELTCTAS-----	OKSIOGHMKNNSQIKILNQGSFLTKPGSKL	76
	:::.....:::.....	
DB	269	LVPKPGSLKLTSCAAGFTFHHYGMWVWQTPDKRLWM-----	VATISGRGT-THYPSDV	322
QY	77	NDRADRSRLMDQGNFPLIKLIKLIKEDSTTYICEVEDQKEVQQLVFLGTANSDTHLLQG		136
DB	323	KGRFTTISDN-DKNALYLOMNSLKSEDDTAMYYC-----	ARRSEFYVGGATYYTSSAMDYWG	376
QY	137	QSLTLTLESPGSSVOCRSPRGNNIOGKILSVSOLEQDGTCTCTVLONQKKEVEFK		196
DB	377	QCASTVTSASTKGRPSVFPPLAPRSKSTSG-TAALGCL-----		413
QY	197	IDIVVLAKQASIIYKKKEGEVEEFSPLAFVEKLTGSGELMWAQARRASSKSWITFDL		256
DB	414	-----VKQYFEPPTVVS-----	NMSGALTSG-----	434

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Oy 25 | KNEVEVKEVTDQPKLQMGKKLPLHLTLPOLAPVAGSGNLTTLAKTKGKHQEVNLVY 31.6
Db 435 | -----VA-TRPAVL-QSSGLYSISSVVTYVSSLSLGTQYI-- 467
Oy 317 | MRATOLQKULTCGEVWGPTSPKLMLSLKLENKEAKVSKKEKEVWVLNLEAGWMOCLSDSG 376f
Db 468 | -----CNV-----NHR----- 474f
Oy 377 | QVLLBSNIKVLPMWSTPVEBPKSCDTHHTCPCPAPABELIGPSVFLPPPKKXDTLMISRT 436f
Db 475 | -----SNTKV-----DKRVPKSCDTHHTCPCPAPABELIGGPSVFLPPPKPDTLMISRT 525f
Oy 437 | EYTCVWVVDVSHEDPEYKFNWYVDGVEVNNATKPREEOYNSTVVSVLTVLHODWLNKG 436f
Db 526 | EYTCVWVVDVSHEDPEYKFNWYVDGVEVNNATKPREEOYNSTVVSVLTVLHODWLNKG 565f
Oy 497 | EYCKCKSNKALPAPIEKTSKAGQPREPOVYTLPPSDELTLKQVSLTCLVKGFPYSDI 55.6f
Db 586 | EYCKCKSNKALPAPIEKTSKAGQPREPOVYTLPPSDELTLKQVSLTCLVKGFPYSDI 64.5f
Oy 557 | AVEMESNGQPENNYKTTPEVLDSGSPFLYSKLTVDKSRWQQNVFSCVWHEALHNHYT 61.6f
Db 646 | AVEMESNGQPENNYKTTPEVLDSGSPFLYSKLTVDKSRWQQNVFSCVWHEALHNHYT 70.5f
Oy 617 | QKSLSLSPG 625
Db 706 | QKSLSLSPG 714

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RESULT 56
US-10-416-011-2
; Sequence 2, Application US/10416011
; Publication No. US20040126363A1
; GENERAL INFORMATION:
; APPLICANT: Jensen, Michael
; APPLICANT: Forman, Stephen
; APPLICANT: Raubitschek, Andrew
; TITLE OF INVENTION: CD19-specific redirected immun
; FILE REFERENCE: 1954-338
; CURRENT APPLICATION NUMBER: US/10/416,011
; CURRENT FILING DATE: 2003-05-07
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 634
; TYPE: PRT
; ORGANISM: Artificial Sequence
FEATURES:
; OTHER INFORMATION: CD19r: zeta chimeric receptor
US-10-416-011-2

```

```

Query March 37.8%; Score 1290; DB 16; Length 634;
Best Local Similarity 46.8%; Pred. No. 3.4e-82;
Matches 304; Conservative 39; Mismatches 121; Indels 186; Gaps 18

QY LLLVLQTL--LP-----AATQGNKVLGKKGDTVELTCTASQKKSIOFHW---K 54
    |||||
DB 2 LLLVTLSCLEPHRAPLLIDIQMTQRTTSSLSASLGGRRVATISCRASGDISKYLMWYQK 61
    |||||

QY 55 NSNOIKILGNQGSPLTKG-PSKLNDRADSRRLMDQGNFLLIKNLKTEDSYI CEVED 113
    :||:|||||
DB 62 PDGTIVKLIIYHTRSRLHSGVPSRFGSGSGT-----DYSLTISNLEODIATVFCQ--- 111
    :||:|||||

QY 114 QKEVEQLLVFGLTANSDTHLLOQGSLLTLESPGSSPSVQCR-SPRKNIQG-KGTLTSV 171
    |||||
DB 112 -----QGNILPYTP-----GGGTKLITGTSSTSGKPGSSGSGSTK 146
    |||||

QY 172 SOLBLQDSG-----TWTCVLVQOKKVEFKIDIVLAFQKASSIVYKKEGEQVEF 221
    :||:|||||
DB 147 GEVTLQKEGPGPLVAPSGSLSTCTV-SSVSLPDVGVSNIIRPPKRG----- 191
    |||||

QY 222 SPPLATVEKLTGSGELMWQAEPRASSSKSWITTFDLKNEKVSVKRVTDPKLQMGKLEPLH 281
    :||:|||||

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Db 192 -----LEMLGVW-----GSETTYNSALKSRITLIK--DNSKQVFLKNSL 232
Qy 282 LTLPLQAL-----PQYAGSGNLTALAEATGKLHQEVNLVWRATQLQKNTLCEVWGPTS 335
Db 233 QTDPAIYYCAKHHYYGGS-----YAMDYWG--- 258
Qy 336 PKLMLSLKLENKAYSKREKPVWVNLBPAGMOCLLSDSGVLLSNIKVLPTWSTPVE 395
Db 259 -----QGTSTVYSS-----VE 269
Qy 396 PKSCDKTHCPCPAPBELLGSPSVLFPKPKDTLMISRTPEVTCVWVDSHEDPEVKFN 455
Db 270 PKSSKTHCPCPAPBELLGSPSVLFPKPKDTLMISRTPEVTCVWVDSHEDPEVKFN 329
Qy 456 WYVDVEVHNAAKTKREBEQYNSTYRVSVLTVLHODMNGKCKYKCNKALPAIEKTI 515
Db 330 WYVDVEVHNAAKTKREBEQYNSTYRVSVLTVLHODMNGKCKYKCNKALPAIEKTI 389
Qy 516 SKAKQAPRPQVYTLPPSRDELTKNQVSLTCLVKGFPSDIAVEMESNGQEPENNYKTTTP 575
Db 390 SKAKQAPRPQVYTLPPSRDELTKNQVSLTCLVKGFPSDIAVEMESNGQEPENNYKTTTP 449
Qy 576 VLDSDGSFFLYSKLTVDKSRMQQGVFSGSVNHEALHNHYYQKSLSLSPG 625
Db 450 VLDSDGSFFLYSKLTVDKSRMQQGVFSGSVNHEALHNHYYQKSLSLSPG 499

RESULT 57
US-10-207-655-15

/ Sequence 15, Application US/10207655
/ Publication No. US20030118592A1
/ GENERAL INFORMATION:
/ APPLICANT: Ledbetter, Jeffrey A.
/ APPLICANT: Hayden-Ledbetter, Martha S.
/ TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
/ FILE REFERENCE: 390069, 401C1
/ CURRENT APPLICATION NUMBER: US/10/207,655
/ CURRENT FILING DATE: 2002-07-25
/ NUMBER OF SEQ ID NOS: 426
/ SOFTWARE: PatentIn version 3.0
/ SEQ ID NO 15
/ LENGTH: 499
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: MOUSE-HUMAN HYBRID FUSION PROTEIN
/ NAME/KEY: SITE
/ LOCATION: (1)..(265)
/ OTHER INFORMATION: MOUSE ANTI-HUMAN CD20 SCFV; 2H7
/ FEATURE:
/ NAME/KEY: DOMAIN
/ LOCATION: (266)..(499)
/ OTHER INFORMATION: HUMAN IGG1 WILD TYPE HINGE, CH2, CH3 FC
US-10-207-655-15

Query Match 37.7%; Score 1288.5; DB 14; Length 499;
Best Local Similarity 48.9%; Pred. No. 3.2e-82;

Matches 299; Conservative 37; Mismatches 127; Indels 149; Gaps 18;

Qy 23 TQGNKVVLAGKKDVELTCTASQKSIQPHWKNISQIKILNGSGFLTKGPSKLNDRADS 82
Db 27 SQSPAILIASPGEKVTMTCRASSSVS-YMHYQOKP-----GSSPKPMIYASNLASGVPA 81
Qy 83 RRLSMDQG-NPPLIKNLKIEDSDPTVYICEVEDQKEVQLVFGTLANSPTHLLOQOSITL 141
Db 82 RFGSGSGTGYSLTISVLEADATATYCO-----QWSFNPTPT---GAGTKL 125
Qy 142 TLESPPSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLAQOKKVEFKIDIV 201
Db 126 ELKDGSGG-----GGSGGGGS---SQAYLQOSGA-----ELV- 156
Qy 202 LAFQKASSIVYKKEGQEVFSPFLAFTVEKLTG-----SGELMWOAERASSSKSWITFDLK 257

Db 157 -----REGASVKNWSC-----KASGTTFTSYNMHWKQTPRQGLEWIG----- 193
Qy 258 NKEVSVKRVYQDPRLLQMGKKLPLHLPLQALPOYAGSGNLTALAEATGKLHQEVNLVVM 317
Db 194 -----ALPYGNDTSSYNOKF-GK----- 211
Qy 318 RATQLQKNTLCEVWGPTSFKMLSLKLENK-----AKYSKREKPVWVNLBPAGMOCLLS 373
Db 212 -----ATLTVDKSSSTAYVQSLSTSEDSAVYGCARVYVSNBYWFD-----VM----- 256
Qy 374 DSGVLLSNIKVLPTWSTPPEPSCDKTHCPCPAPBELLGSPSVLFPKPKDTLMIS 433
Db 257 GTGFTTVSD-----QEPKSCDKTHCPCPAPBELLGSPSVLFPKPKDTLMIS 306
Qy 434 RTPVTCVWVDSHEDPEVKFNWYVDVEVHNAAKTKREBEQYNSTYRVSVLTVLHODWL 493
Db 307 RTPVTCVWVDSHEDPEVKFNWYVDVEVHNAAKTKREBEQYNSTYRVSVLTVLHODWL 366
Qy 494 NGKEYKCKVSNKALPAIEKTISSKAKQAPRPQVYTLPPSRDELTKNQVSLTCLVKGFYP 553
Db 367 NGKEYKCKVSNKALPAIEKTISSKAKQAPRPQVYTLPPSRDELTKNQVSLTCLVKGFYP 426
Qy 554 SDIAVEMESNGQEPENNYKTTTPVLDSDGSFFLYSKLTVDKSRMQQGVFSGSVNHEALHN 613
Db 427 SDIAVEMESNGQEPENNYKTTTPVLDSDGSFFLYSKLTVDKSRMQQGVFSGSVNHEALHN 486
Qy 614 HYTKSLSLSPG 625
Db 487 HYTKSLSLSPG 498

RESULT 58
US-10-207-655-148

/ Sequence 148, Application US/10207655
/ Publication No. US20030118592A1
/ GENERAL INFORMATION:
/ APPLICANT: Ledbetter, Jeffrey A.
/ APPLICANT: Hayden-Ledbetter, Martha S.
/ TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
/ FILE REFERENCE: 390069, 401C1
/ CURRENT APPLICATION NUMBER: US/10/207,655
/ CURRENT FILING DATE: 2002-07-25
/ NUMBER OF SEQ ID NOS: 426
/ SOFTWARE: PatentIn version 3.0
/ SEQ ID NO 148
/ LENGTH: 499
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Mouse-Human hybrid fusion protein
US-10-207-655-148

Query Match 37.7%; Score 1288.5; DB 14; Length 499;
Best Local Similarity 48.9%; Pred. No. 3.2e-82;

Matches 299; Conservative 37; Mismatches 127; Indels 149; Gaps 18;

Qy 23 TQGNKVVLAGKKDVELTCTASQKSIQPHWKNISQIKILNGSGFLTKGPSKLNDRADS 82
Db 27 SQSPAILIASPGEKVTMTCRASSSVS-YMHYQOKP-----GSSPKPMIYASNLASGVPA 81
Qy 83 RRLSMDQG-NPPLIKNLKIEDSDPTVYICEVEDQKEVQLVFGTLANSPTHLLOQOSITL 141
Db 82 RFGSGSGTGYSLTISVLEADATATYCO-----QWSFNPTPT---GAGTKL 125
Qy 142 TLESPPSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLAQOKKVEFKIDIV 201
Db 126 ELKDGSGG-----GGSGGGGS---SQAYLQOSGA-----ELV- 156
Qy 202 LAFQKASSIVYKKEGQEVFSPFLAFTVEKLTG-----SGELMWOAERASSSKSWITFDLK 257
Db 157 -----RFGASVKNWSC-----KASGTTFTSYNMHWKQTPRQGLEWIG----- 193


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QY 258 NKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLLAEKTKLHOEVLVVM 317
DB 194 -----ATYPNGDTSYNQKFK-GK----- 211
QY 318 RATOLQKRLTCVWGPSPKMLSLKLENKE-----AKVSKREKPVVNLNPEAGMQCLLS 373
DB 212 -----ATLTVDKSSSTAYWQLSLTSEDSAVYFCARVYYNSNSWYFD-----VM----- 256
QY 374 DSGQVLLBSNIVLPTWSTPVEPKSCDKHTTCCPCPAPELLGGPSVFLPPEPKDTLMIS 433
DB 257 GIGTIVTVSD-----QEPKSCDKHTTCCPCPAPELLGGPSVFLPPEPKDTLMIS 306
QY 434 RTPEVTCVVVDVSHEDPEVKFNNYVDGVEVHNAKTRPREQYNSTYRVVSVLTVLHQDWL 493
DB 307 RTPEVTCVVVDVSHEDPEVKFNNYVDGVEVHNAKTRPREQYNSTYRVVSVLTVLHQDWL 366
QY 494 NGEYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYP 553
DB 367 NGEYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYP 426
QY 554 SDIAVEMESNGQPENNYKTTTPVLDSGSPFLYSKLTVDKSRMQGQNVFSCVMEHALHN 613
DB 427 SDIAVEMESNGQPENNYKTTTPVLDSGSPFLYSKLTVDKSRMQGQNVFSCVMEHALHN 486
QY 614 HYTKSLSLSPG 625
DB 487 HYTKSLSLSPG 498

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RESULT 59
US-10-053-530-15

```

; Sequence 15, Application US/10053530
; Publication No. US20030133939A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey
; APPLICANT: Hayden-Ledbetter, Martha
; TITLE OF INVENTION: Binding Domain-Immunoglobulin Fusion Proteins
; FILE REFERENCE: 390069, 401
; CURRENT APPLICATION NUMBER: US/10/053,530
; CURRENT FILING DATE: 2002-01-17
; PRIOR APPLICATION NUMBER: US 09/765,208
; PRIOR FILING DATE: 2001-01-17
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 15
; LENGTH: 499
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (1)..(265)
; OTHER INFORMATION: MOUSE ANTI-HUMAN CD20 SCFV: 2H7
; NAME/KEY: DOMAIN
; LOCATION: (266)..(499)
; OTHER INFORMATION: HUMAN IGG1 WILD TYPE HINGE, CH2, CH3 FC
US-10-053-530-15

```

```

Query Match 37.7%; Score 1288.5; DB 14; Length 499;
Best Local Similarity 48.9%; Pred. No. 3,2e-82;
Matches 289; Conservative 37; Mismatches 127; Indels 149; Gaps 18;
QY 23 TQGNKVVLGKGGTVELTCTASQKSIQFMKNSNQIKLGNQSLTGPSTLNDNRADS 82
DB 27 SGPALSLASPGKVTMTCTCRASSVS-YMMWYQOKP-----GSSPKPMIYAPSNLASGVA 81
QY 83 RRLSLMDQG-NFPIILIKNLKIEDSDTYICEVEDQKEEVQLLVFGLTANSDTHLLQGQSLTL 141
DB 82 RFGSGSGSGTISYLTLSRVEAEDAAITYYC-----QMSNPPPTF---GAGTKL 125
QY 142 TLESPPGSSPSVOCRSRPRGNIOGKTLVSQLELDSDGTWTCTVLQONKQVEFKIDIV 201
DB 126 ELKDGGSQ-----GGGSGGGS-----SQAYVLQSGA-----ELV- 156

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QY 202 IAFQKASSIVYKGEQVESPFLAFTVEKLTG-----SGELMWQLEKASSSKSWITFDLK 257
DB 157 -----RFGASVMSK-----KASGTYFTSYNMHWKQOTRQGLEWIG----- 193
QY 258 NKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLLAEKTKLHOEVLVVM 317
DB 194 -----ATYPNGDTSYNQKFK-GK----- 211
QY 318 RATOLQKRLTCVWGPSPKMLSLKLENKE-----AKVSKREKPVVNLNPEAGMQCLLS 373
DB 212 -----ATLTVDKSSSTAYWQLSLTSEDSAVYFCARVYYNSNSWYFD-----VM----- 256
QY 374 DSGQVLLBSNIVLPTWSTPVEPKSCDKHTTCCPCPAPELLGGPSVFLPPEPKDTLMIS 433
DB 257 GIGTIVTVSD-----QEPKSCDKHTTCCPCPAPELLGGPSVFLPPEPKDTLMIS 306
QY 434 RTPEVTCVVVDVSHEDPEVKFNNYVDGVEVHNAKTRPREQYNSTYRVVSVLTVLHQDWL 493
DB 307 RTPEVTCVVVDVSHEDPEVKFNNYVDGVEVHNAKTRPREQYNSTYRVVSVLTVLHQDWL 366
QY 494 NGEYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYP 553
DB 367 NGEYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYP 426
QY 554 SDIAVEMESNGQPENNYKTTTPVLDSGSPFLYSKLTVDKSRMQGQNVFSCVMEHALHN 613
DB 427 SDIAVEMESNGQPENNYKTTTPVLDSGSPFLYSKLTVDKSRMQGQNVFSCVMEHALHN 486
QY 614 HYTKSLSLSPG 625
DB 487 HYTKSLSLSPG 498

```

RESULT 60
US-10-207-655-266

```

; Sequence 266, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden-Ledbetter, Martha S.
; TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
; FILE REFERENCE: 390069, 401C1
; CURRENT APPLICATION NUMBER: US/10/207,655
; CURRENT FILING DATE: 2002-07-25
; NUMBER OF SEQ ID NOS: 426
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 266
; LENGTH: 552
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: fusion polypeptide
US-10-207-655-266

```

```

Query Match 37.7%; Score 1288.5; DB 14; Length 552;
Best Local Similarity 46.4%; Pred. No. 3,6e-82;
Matches 299; Conservative 41; Mismatches 122; Indels 183; Gaps 17;
QY 1 NMRGVPFRHLILVLLALPLPATQGNKVVLGKGGTVELTCTASQKSIQFMW-----KNSN 57
DB 19 MSGRVD-----IVL-----TQSPATLSVTPGGRVLSLCSASSISIDYLMHWYQOKSH 65
QY 58 QIKILGNQSGFLTKG-PSKLNDRADRSRLMDQGNFPIILIKNLKIEDSDTYICEVEDQKE 116
DB 66 SPRLILIKYASHSISIGIPRFSGSGS-----SDFTLSINSVEBEDVGIYYC----- 112
QY 117 EVQLVPGVLTANSDTHLLQGQSLTTLTLESPPGSSPSVOCRSRPRGNIOGKTLVSQLEL 176
DB 113 -----HGHSFPWTF---GGGTKLEIKKGGGSGGSGSGGSGSQTQL 150
QY 177 QDSGTWTCTVLQONKQVEFKIDIVLAFQKASSIVYKGEQVESPFLAFTVEKLTG-----LAF- 228

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Db 151 VQSGP-----ELKKGETRISCKASGVAFTTGMQ 181
Qy 229 -VEKLTGSGELWQAERASSSKSWITFDLKNKEVSVKRTQDPKLOMGKLLPLHLTLPOA 287
Db 192 WQGEHPGKGLK-----IGMINTPLMSAKIC-----RRQ----- 211
Qy 288 LPQVAGSGLTLALEAKTGKLEHVEVNLVVMRATQLOKLTCEVWGPISPKMLSLKLEBK 347
Db 212 -----GRFAFSLETSANTAYLQIS-----NLKDE-- 235
Qy 348 EAKVSKREKRPVAVLPEAGMOCLLSDSGQVLESNIKVLPTWS-----TPVSKSCD 400
Db 226 -----DATTYFCVRSNGNRY-----DLVFAVWGGQTLVTWSDLEPKSSD 275
Qy 401 KHTTCCPAPAPELLGSPVFLFPKPKDPLMISRTPEVTCVVVDVSHEDPEVKFMWYDG 460
Db 276 KHTTSPAPAPELLGSSVFLFPKPKDPLMISRTPEVTCVVVDVSHEDPEVKFMWYDG 335
Qy 461 VEVNNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKG 520
Db 336 VEVNNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKG 395
Qy 521 QPREQVYTTLPSSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSD 580
Db 396 QPREQVYTTLPSSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSD 455
Qy 581 GSFFLYSKLTVDKSRMWOQGNVFSCVMEHALHNHYTQKSLSLSPG 625
Db 456 GSFFLYSKLTVDKSRMWOQGNVFSCVMEHALHNHYTQKSLSLSPG 500

RESULT 61
US-10-334-235-38
; Sequence 38, Application US/10334235
; Publication No. US20040131591A1
; GENERAL INFORMATION:
; APPLICANT: Oxford Biomedica (UK) Ltd.
; APPLICANT: Kingsman, Alan
; APPLICANT: Bebbington, Christopher
; APPLICANT: Carroll, Miles
; APPLICANT: Ellard, Fiona
; APPLICANT: Kingsman, Susan
; APPLICANT: Myers, Kevin
; APPLICANT: Lamikandra, Abigail
; TITLE OF INVENTION: VECTOR SYSTEM
; FILE REFERENCE: 532682000920
; CURRENT APPLICATION NUMBER: US/10/334,235
; CURRENT FILING DATE: 2002-12-30
; PRIOR APPLICATION NUMBER: US 10/060,585
; PRIOR FILING DATE: 2002-01-29
; PRIOR APPLICATION NUMBER: PCT/GB00/04317
; PRIOR FILING DATE: 2000-11-13
; PRIOR APPLICATION NUMBER: US 09/445,375
; PRIOR FILING DATE: 1998-06-04
; NUMBER OF SEQ ID NOS: 40
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 38
; LENGTH: 600
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: peptide of 574Sabl
US-10-334-235-38

Query Match 37.7%; Score 1287; DB 16; Length 600;
Best Local Similarity 48.9%; Pred. No. 5.2e-82;
Matches 31; Conservative 53; Mismatches 158; Indels 114; Gaps 20;
Qy 30 LGKKDVTVELTCTAS--QKSIQFHKNSNOKIIG-----NQGSLTKGSPSKLNDRA-- 80
Db 33 LKVPASAKYISKAGSYFTGYVMWVQSHSKSLFWGIRINPNNGVTLNOKKFDKAIL 92
Qy 81 ---DSRSLWQGNFPLIINKLIKEDSDTYICEVEDQKEEVQLVFGLTANSDTHLQ-- 135

Db 93 TVDKSSTTAY-----NELRSLTSEDAVYYC-----ARSTMINYWDY 131
Qy 136 -GOSLTLTLSPSPSSPVOCRSRPNKIOGKTLVSQ-----LELDGSGTTCVTLQ 188
Db 132 WQVTSVTVSSGGGSG-----GGTGGGSSIVWQVPTFLVLSAGDRIYTTCK-- 181
Qy 189 NQKVEFKRIDVLVAFQKASSIV--YKKEGEQVEF-----SPPLAFTVEKLTGSGELW 240
Db 182 -----ASGSNDVAVWQKQGSPTLLISYSSRYAGVPDRFISG----- 223
Qy 241 QAEASSSKSWITFDLKNKEVSVKRTQD-----PKLOMGKLLPLHLTL--POLPQVAG 293
Db 224 -----YGTDFPTTSTLQAEIDLAVYFCOODYNSPPTFGGDTLEIKRATKGPVFP-LAP 278
Qy 294 SGNLTALBAKGTGLEHVEVNLVVMRATQLOKLTCEVWGPISPKMLSLKLENKAVYSK 353
Db 279 SSKTSGGTALGCLVKDQYRPPEVTVSNAGALTSGV--HTFPVLDSSGLYSLSVTV 336
Qy 354 REKEPVWLNPEAGM-----WQCLSDSGQVLESNIKVLPTWSTPEVSKCDKHTCCPCP 409
Db 337 -----PSSLGQTGYICNVNHK-----PSNTKV-----DKVEPKSCDKHTCCPCP 378
Qy 410 APELLGSPVFLFPKPKDPLMISRTPEVTCVVVDVSHEDPEVKFMWYDGVEVHNAKTK 469
Db 379 APELLGSPVFLFPKPKDPLMISRTPEVTCVVVDVSHEDPEVKFMWYDGVEVHNAKTK 438
Qy 470 PREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKQPREPOYT 529
Db 439 PREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKQPREPOYT 498
Qy 530 LPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPVLDSDGSFFLYSKL 589
Db 499 LPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQENNYKTPPVLDSDGSFFLYSKL 558
Qy 590 TVDKSRMWOQGNVFSCVMEHALHNHYTQKSLSLSPG 625
Db 559 TVDKSRMWOQGNVFSCVMEHALHNHYTQKSLSLSPG 594

RESULT 62
US-10-435-299-7
; Sequence 7, Application US/10435299
; Publication No. US20040052783A1
; GENERAL INFORMATION:
; APPLICANT: Welner, George
; APPLICANT: Glingrich, Roger
; APPLICANT: Link, Brian
; APPLICANT: Tso, J. Yun
; TITLE OF INVENTION: HUMANIZED ANTIBODIES AGAINST CD3
; FILE REFERENCE: 05882-0176-CNUS04
; CURRENT APPLICATION NUMBER: US/10/435,299
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 09/618,380
; PRIOR FILING DATE: 2000-07-18
; PRIOR APPLICATION NUMBER: US 08/397,411
; PRIOR FILING DATE: 1995-03-01
; PRIOR APPLICATION NUMBER: US 07/859,583
; PRIOR FILING DATE: 1992-03-27
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
; LENGTH: 446
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Complete heavy chain of Humanized 1D10 Ab
US-10-435-299-7

Query Match 37.7%; Score 1286.5; DB 12; Length 446;
Best Local Similarity 48.4%; Pred. No. 3.8e-82;
Matches 292; Conservative 33; Mismatches 103; Indels 175; Gaps 14;

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Qy 30 LGKKGDTVELTCTAQSQKSIQF--HWKNSNQIKILGNQGSFLTQGPSKLNDRADSRRL- 86
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 11 LVKPSFTLSLTCTVSGFSLTNGVHWVROS PGKGLMEIVGMKSGSTENNAFISRLTIS 70
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 87 --WDQGNFPLIIKNLIKIEDSDTYICEVEDQKEVQLLVGLTANSDTHLQ--GQSLTLT 142
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 71 KQTSKNQVSLKLNLSLTADTAIVYC-----ARNDRYAMDVWGQGTLYT 113
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 143 LESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDSDGTWCTVLTQNKVFEKIDIVL 202
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 114 VSSASTKGPSVFPPLAPSSKSTSGG--TALAGCL----- 144
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 203 AFQKASSIYKKKEGQVEFSFPLAFTVEKLTGSGELMQABRASSSKSWITFDLKNKEVS 262
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 145 -----VKDYFPEPVTVS-----MNSGALTSG----- 165
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 263 VKRVTQDPKLGKGLPLHLTLPLQALPQYAGSGLTLALEAKTGKJHGVNLVWMRATOL 322
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 166 -----VH--TFPAVL--QSSGLYSLSVTVTPSSSLGTQTYI----- 198
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 323 QKNLTCEVWGPSPKMLSLKLENKEAKVSKREKPYWVLNPEAGMQLLSDSGVLLS 382
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 199 -----CNV-----NHRP-----S 206
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 383 NIKVLPTWSTPVEPKSCDKHTHCPCPAPABELLGSPVFLFPPKPKDTLMISRTPEVTCV 442
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 207 NTKV-----DKVVEPKSCDKHTHCPCPAPABELLGSPVFLFPPKPKDTLMISRTPEVTCV 262
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 443 VDVSHEDEPVKFNWYVDGVEVHNAKTKPREBOYNSTYRVSVLTVLHODMLNGEKYKCV 502
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 263 VVSHSDPEVKFNWYVDGVEVHNAKTKPREBOYNSTYRVSVLTVLHODMLNGEKYKCV 322
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 503 SNKALPAPIEKTISKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMES 562
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 323 SNKALPAPIEKTISKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMES 382
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 563 NGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRMQGVFSCSVHMEALAHNYTQKSL 622
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 383 NGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRMQGVFSCSVHMEALAHNYTQKSL 442
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 623 SPG 625
   |||
Db 443 SPG 445

```

```

RESULT 63
US-10-418-836-38
; Sequence 38, Application US/10418836
; Publication No. US20040018573A1
; GENERAL INFORMATION:
; APPLICANT: Power, Scott D.
; APPLICANT: Wang, Huang
; APPLICANT: Ward, Michael
; TITLE OF INVENTION: Production of Functional Antibodies in
; FILE REFERENCE: GC741-2
; CURRENT APPLICATION NUMBER: US/10/418, 836
; CURRENT FILING DATE: 2003-04-17
; PRIOR APPLICATION NUMBER: US 60/373, 889
; PRIOR FILING DATE: 2002-04-18
; PRIOR APPLICATION NUMBER: US 60/411, 540
; PRIOR FILING DATE: 2002-09-18
; PRIOR FILING DATE: 2003-03-04
; PRIOR APPLICATION NUMBER: US 60/452, 134
; PRIOR FILING DATE: 2003-03-04
; PRIOR APPLICATION NUMBER: US 60/411, 537
; PRIOR FILING DATE: 2002-09-18
; NUMBER OF SEQ ID NOS: 40
; SOFTWARE: FaastSeq for Windows Version 4.0
; SEQ ID NO 38
; LENGTH: 972
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:

```

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; OTHER INFORMATION: fusion protein
US-10-418-836-38
Query Match 37.7%; Score 1286.5; DB 15; Length 972;
Best Local Similarity 48.4%; Pred. No. 1.1e-81;
Matches 292; Conservative 33; Mismatches 103; Indels 175; Gaps 14;

Qy 30 LGKKGDTVELTCTAQSQKSIQF--HWKNSNQIKILGNQGSFLTQGPSKLNDRADSRRL- 86
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 537 LVKPSFTLSLTCTVSGFSLTNGVHWVROS PGKGLMEIVGMKSGSTENNAFISRLTIS 596
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 87 --WDQGNFPLIIKNLIKIEDSDTYICEVEDQKEVQLLVGLTANSDTHLQ--GQSLTLT 142
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 597 KQTSKNQVSLKLNLSLTADTAIVYC-----ARNDRYAMDVWGQGTLYT 639
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 143 LESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDSDGTWCTVLTQNKVFEKIDIVL 202
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 640 VSSASTKGPSVFPPLAPSSKSTSGG--TALAGCL----- 670
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 203 AFQKASSIYKKKEGQVEFSFPLAFTVEKLTGSGELMQABRASSSKSWITFDLKNKEVS 262
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 671 -----VKDYFPEPVTVS-----MNSGALTSG----- 691
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 263 VKRVTQDPKLGKGLPLHLTLPLQALPQYAGSGLTLALEAKTGKJHGVNLVWMRATOL 322
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 692 -----VH--TFPAVL--QSSGLYSLSVTVTPSSSLGTQTYI----- 724
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 323 QKNLTCEVWGPSPKMLSLKLENKEAKVSKREKPYWVLNPEAGMQLLSDSGVLLS 382
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 725 -----CNV-----NHRP-----S 732
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 383 NIKVLPTWSTPVEPKSCDKHTHCPCPAPABELLGSPVFLFPPKPKDTLMISRTPEVTCV 442
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 723 NTKV-----DKVVEPKSCDKHTHCPCPAPABELLGSPVFLFPPKPKDTLMISRTPEVTCV 788
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 443 VDVSHEDEPVKFNWYVDGVEVHNAKTKPREBOYNSTYRVSVLTVLHODMLNGEKYKCV 502
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 789 VDVSHEDEPVKFNWYVDGVEVHNAKTKPREBOYNSTYRVSVLTVLHODMLNGEKYKCV 848
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 503 SNKALPAPIEKTISKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMES 562
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 849 SNKALPAPIEKTISKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMES 908
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 563 NGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRMQGVFSCSVHMEALAHNYTQKSL 622
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Db 909 NGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRMQGVFSCSVHMEALAHNYTQKSL 968
   |||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:
Qy 623 SPG 625
   |||
Db 969 SPG 971

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RESULT 64
US-10-418-836-39
; Sequence 39, Application US/10418836
; Publication No. US20040018573A1
; GENERAL INFORMATION:
; APPLICANT: Power, Scott D.
; APPLICANT: Wang, Huang
; APPLICANT: Ward, Michael
; TITLE OF INVENTION: Production of Functional Antibodies in
; FILE REFERENCE: GC741-2
; CURRENT APPLICATION NUMBER: US/10/418, 836
; CURRENT FILING DATE: 2003-04-17
; PRIOR APPLICATION NUMBER: US 60/373, 889
; PRIOR FILING DATE: 2002-04-18
; PRIOR FILING DATE: 2003-03-04
; PRIOR APPLICATION NUMBER: US 60/452, 134
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: US 60/411, 537
; PRIOR FILING DATE: 2002-09-18

```

NUMBER OF SEQ ID NOS: 40
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 39
LENGTH: 975
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion protein
US-10-418-836-39

Query Match 37.7%; Score 1286.5; DB 15; Length 975;
Best Local Similarity 48.4%; Pred. No. 1.1e-81;
Matches 292; Conservative 33; Mismatches 103; Indels 175; Gaps 14;

QY 30 LGKKDDYELCTAQQKSIQF--HWKSNQKILGNQGSFLTKGSKLNDRADSRSL- 86
DB 540 LKPBETSLTCTTSGFSLTNGVMWROSPCKLEWIGVKMSGGSTYNAAFISRLTIS 599
QY 87 --WDGNFPLIINKLIEDSDTYICEVDQKEVQLVFGLTANSDTHLQ--GQSLTLT 142
DB 600 KDTSKNQVSLKLNLSLTADTAVYC-----ARRDRYAMDYWGGLT 642
QY 143 LSPGSSPSVQCSPPKGNIOGKTLISQLELSDSGTCTTCLQNKVFEKIDIVL 202
DB 643 VSSASTKPSVFPPLAPSSKSTSG--TAALGCL----- 673
QY 203 AFQKASTVYKKEGQVEFPLAFTVEKLTGSGELMQAERASSKSMITFDLKNKVS 262
DB 674 -----VDYFPEPYTVS-----NNSGALTSG----- 694
QY 263 VKRVTDPEKLOMGKLLPLHLTLPOALPOYAGSGNLTALAEKGTGLHOEVNLVVMRATOL 322
DB 695 -----VH--TTPAVL--QSSGLYSLSVVTVPSLSLGTQYI----- 727
QY 323 QKNTCEWGPSPKLMISLKENKAVSKREKVVWLNPEAGMOCLLSDSGVLLS 382
DB 728 ----CNV-----NHRK-----S 735
QY 383 NIKVLPTMSTPYEPKCDKTHTCPPCAPPELLGGSVFLPPPKDOLMISRTPEVTCV 442
DB 736 NTKV---DKVPEPSCDKHTCPCCPAPPELLGGSVFLPPPKDOLMISRTPEVTCV 791
QY 443 VDVSHEDEPVKKNVVDGEVHNNAKTKPREQYNSTYVSVLTVLHODMNGEKYCKV 502
DB 792 VDVSHEDEPVKKNVVDGEVHNNAKTKPREQYNSTYVSVLTVLHODMNGEKYCKV 851
QY 503 SNKALPAIEKTISSAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMES 562
DB 852 SNKALPAIEKTISSAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMES 911
QY 563 NGOPENNKTTPPVLDSDGSFFLYSKLTVYDKSRMOQGNVFSQVHNEALHNHYTQKSLSL 622
DB 912 NGOPENNKTTPPVLDSDGSFFLYSKLTVYDKSRMOQGNVFSQVHNEALHNHYTQKSLSL 971
QY 623 SPG 625
DB 972 SPG 974

RESULT 65
US-09-773-877A-18
Sequence 18, Application US/09773877A
Publication No. US2003001797A1
GENERAL INFORMATION:
APPLICANT: Xia, Yu-Ping et al.
TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES
FILE REFERENCE: REG 710B
CURRENT APPLICATION NUMBER: US/09/773,877A
CURRENT FILING DATE: 2001-01-31
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn version 3.0
SEQ ID NO 18
LENGTH: 462

TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Flt1(2-3)-Fc (Muc3)
US-09-773-877A-18

Query Match 37.7%; Score 1286; DB 12; Length 462;
Best Local Similarity 55.4%; Pred. No. 4.3e-82;
Matches 279; Conservative 37; Mismatches 84; Indels 104; Gaps 16;

QY 178 DSGMTCTVLIQ-----NOKVFEKIDIVVLAQKASIVYKKEGQVEFPLAF 227
DB 6 DTGVLICALISCLLTGSSSGRPFVEM-----YSEIPEIIMTEGR--ELVTCRV 55
QY 228 TVEELT-----GSGELMQAERASSKSMITFDLKNKVSVKRVTDPEKLO 273
DB 56 TSPNITTLTKKFPDLTILPQKRIW-----DSRKGFIISNATYKIGL----- 99
QY 274 MGKKLPLHLTLPOALPOYAGSGNLTALAEKGTGL--HOEVNLV-----MRAIOLQN- 325
DB 100 -----LTCEATV-----NGHL-----YKTNVLTFRQNTIIDVQISTPRPVKLLRGH 141
QY 326 ---LTCEWGPSPKMLSLKL--ENKEAKVSKR-----EKPVAVLN 362
DB 142 TVVLTNCTATTPLTNTVQMTWSYPDEKKNRASVRRRIDQSNHANIFYSVLTIDK--MON 198
QY 363 PEAGMOCLLSDSGQVLLBSNIRY--LPTWSTPYEPKSCDKTHTCPPCAPPELLGGSPVFL 421
DB 199 KDKGLYTCRV--SGPSKSVNTSVHIDYKAGPGEPPSCDKTHTCPPCAPPELLGGSPVFL 257
QY 422 FPPPKDOLMISRTPEVTCVVDVSHEDPEVKKNVVDGEVHNNAKTKPREQYNSTYRV 481
DB 258 FPPPKDOLMISRTPEVTCVVDVSHEDPEVKKNVVDGEVHNNAKTKPREQYNSTYRV 317
QY 482 VSVTLTVHOMLNGEKYCKVSNKALPAIEKTISSAKGQPREPOVYTLPPSRDELTKNQ 541
DB 318 VSVTLTVHOMLNGEKYCKVSNKALPAIEKTISSAKGQPREPOVYTLPPSRDELTKNQ 377
QY 542 VSLTCLVKGFYPSDIAVEMESNGOPENNKTTPPVLDSDGSFFLYSKLTVYDKSRMOQGNV 601
DB 378 VSLTCLVKGFYPSDIAVEMESNGOPENNKTTPPVLDSDGSFFLYSKLTVYDKSRMOQGNV 437
QY 602 FSCGVHNEALHNHYTQKSLSLSPG 625
DB 438 FSCGVHNEALHNHYTQKSLSLSPG 461

RESULT 66
US-10-282-162-52
Sequence 52, Application US/10282162
Publication No. US20030143697A1
GENERAL INFORMATION:
APPLICANT: REGENERON PHARMACEUTICALS, INC.
TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
FILE REFERENCE: REG 203-B-US
CURRENT APPLICATION NUMBER: US/10/282,162
CURRENT FILING DATE: 2002-10-28
PRIOR APPLICATION NUMBER: 09/787,835
PRIOR FILING DATE: 1999-09-22
PRIOR APPLICATION NUMBER: PCT/US99/22045
PRIOR FILING DATE: 1999-09-22
NUMBER OF SEQ ID NOS: 56
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 52
LENGTH: 915
TYPE: PRT
ORGANISM: Homo sapiens
US-10-282-162-52
Query Match 37.7%; Score 1286; DB 14; Length 915;
Best Local Similarity 45.8%; Pred. No. 1.1e-81;
Matches 298; Conservative 51; Mismatches 129; Indels 172; Gaps 17;

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Qy 33 KGDVTELTCT-----ASQKSIQPHW-KNSNOIKILGNQGSFLTQKPSKLNDRADSR 84
Db 380 EGEFVALRCQVQYWMASVSPRINLTWKNDSARVTPG-----EET 422
Qy 85 SLWDGQNFLLIKNLKIEDSDTYICEVED-----QKEEVQLVFGLTANSDBHL---LQOQ 137
Db 423 RMAQOGALMLLPALQ-EDSGTVCTTRNASYCDKMSIELRVF---ENTDAFLPFIISYQ 478
Qy 138 SLTLT-----LESPPG-----SPVQCRSPRGKNIQGGKITSVSLBQ 177
Db 479 ILTLSTSGVLVCPDSEFTDKTDVKIQWYKDSLDDKDNKELSRGTGTHLHVHVALE 538
Qy 178 DSGTMTCTV-----LONQKVEFKIDIVIAFQKASSIVYKKEGQVEF 221
Db 539 DAGYVCVLTFAHEGQOYNTIRSEIRIKKKEETIPVLIISPKTISASLSGR-----591
Qy 222 SEPPLATVEKLTGSGE-----LWMAERASSSSKSWITFDLKNKEVSVKATODPKLQMGK 276
Db 592 ---LTIIPCKVFLGTGTPLTMLMTANDTHIESAY-----PGRVTGEPQGEYSB 638
Qy 277 KLPBLHTLQALPQVAGSGLTLALAEAKTGK-LHQEVNLVYMRATOLQKNTLCEWGPFS 335
Db 639 NNENYIEVP-----LIFDPVTRBDLHMDPKCVHNTLSFQ-----673
Qy 336 PKLMLSLKLENKEAKVSKREKPVWVNLNPEAGMWQCLSDSGOVLLESNTKVLPTWSTPVE 395
Db 674 -----TLKRTTVKEAS-----S 684
Qy 396 PKSCDTHKTCPCPAPABELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKEN 455
Db 685 TFSGDTHKTCPCPAPABELLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKEN 744
Qy 456 WYVDGVEVHNAAKTPREEQYNSTRVSVLTVLHODMLNGKEYCKCVSNKALPAPIEKT 515
Db 745 WYVDGVEVHNAAKTPREEQYNSTRVSVLTVLHODMLNGKEYCKCVSNKALPAPIEKT 804
Qy 516 SKAGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVEMESNGOPENNYKTTTP 575
Db 805 SKAGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAVEMESNGOPENNYKTTTP 864
Qy 576 VLDSGDSFFLYSKLTVDKSRMOQGNVFGSVHMEALHNHYTKSLISLSPG 625
Db 865 VLDSGDSFFLYSKLTVDKSRMOQGNVFGSVHMEALHNHYTKSLISLSPG 914

RESULT 67
US-10-404-724-23
; Sequence 23, Application US/10404724
; Publication No. US20030203447A1
; GENERAL INFORMATION:
; APPLICANT: Horwitz, Arnold H.
; TITLE OF INVENTION: Methods and Materials for Increasing Expression of Recombinant
; FILE OF INVENTION: Polypeptides
; FILE REFERENCE: 13698U501
; CURRENT APPLICATION NUMBER: US/10/404,724
; CURRENT FILING DATE: 2003-03-31
; PRIOR APPLICATION NUMBER: US 60/368,530
; PRIOR FILING DATE: 2002-03-29
; NUMBER OF SEQ ID NOS: 79
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 23
; LENGTH: 465
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-404-724-23

Query Match 37.6%; Score 1284.5; DB 12; Length 465;
Best Local Similarity 47.4%; Pred. No. 5.5e-82;
Matches 302; Conservative 32; Mismatches 102; Indels 201; Gaps 17;
Qy 11 LVLQALALPAATQGNKVLG-----KQGDVTELTCTASQKSIQPHWKNNOIKILGNQ 66

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Db 7 LLLFMAAASQAQAIQLVQSGPEVKKPGEYSKISCKAS---GYTFETKGMWVQAPQCG 63
Qy 67 -----SFLTPGPKLNDRADSRSLMDQNF-----LIIKNIKIEDSDTY 108
Db 64 LKMMGMINTYEEPPYGGD-----FKGRFTFLDTSTSTAVLETSSLRSEDTATYF 114
Qy 109 CEVEDQKEEVQLVFGLTANSDBTHLLOQOSLTLTLESPPGSSPVQCRSPRGKNIQGGKT 168
Db 115 C-----ARGSADV-----YMOGTLTVYSASTKQSPVPLAPSSKTSQGT-T 157
Qy 169 LSVQLELQDSTGWTCTVLOQKVEFKIDIVIAFQKASSIVYKKEGQVEFSPPLAFT 228
Db 158 AALGCL-----VNDYPEPVT 173
Qy 229 VEKLTGSGELWQARASSSSKSWITFDLKNKEVSVKATODPKLQMGKLLPLHLTLQAL 288
Db 174 VS-----WNSGALTSG-----VH-TFPAYL 192
Qy 289 PQYAGSGLTLALBAKTKGLHQBVLVYMRATOLQKNTLCEWGPFSPKMLSLKLENKE 348
Db 193 -QSSGLYLSVTVTPSSSLGTQTYI-----CNV-----220
Qy 349 AKVSRKRPVWVNLNPEAGMWQCLSDSGOVLLESNIKVLPTWSTPVEBPKSCDKHTCPPC 408
Db 221 -----NHKP-----SNTKV-----DKRVERPKSCDKHTCPPC 247
Qy 409 PAPBLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKENYVNGVEVHNAAKT 468
Db 248 PAPBLGGPSVFLFPPPKDPTLMISRTPEVTCVVDVSHEDPEVKENYVNGVEVHNAAKT 307
Qy 469 KPREQYNSTRVSVLTVLHODMLNGKEYCKCVSNKALPAPIEKTISKAGQPREPOVY 528
Db 308 KPREQYNSTRVSVLTVLHODMLNGKEYCKCVSNKALPAPIEKTISKAGQPREPOVY 367
Qy 529 TLPPSRDELTKNOVSLTCLVKGFPSPDIAVEMESNGOPENNYKTTTPVPLDSGSEFLYSK 588
Db 368 TLPPSRDELTKNOVSLTCLVKGFPSPDIAVEMESNGOPENNYKTTTPVPLDSGSEFLYSK 427
Qy 589 LTVDSRWQGNVFGSVHMEALHNHYTKSLISLSPG 625
Db 428 LTVDSRWQGNVFGSVHMEALHNHYTKSLISLSPG 464

RESULT 68
US-10-656-769-32
; Sequence 32, Application US/10656769
; Publication No. US2004009712A1
; GENERAL INFORMATION:
; APPLICANT: Varnum, Brian
; APPLICANT: Weizina, Chris
; APPLICANT: Wong, Lu Min
; APPLICANT: Qian, Xueming
; TITLE OF INVENTION: Therapeutic Human Anti-IL-1R Monoclonal Antibody
; FILE REFERENCE: 01,1554
; CURRENT APPLICATION NUMBER: US/10/656,769
; CURRENT FILING DATE: 2003-09-05
; NUMBER OF SEQ ID NOS: 79
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 32
; LENGTH: 467
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-656-769-32

Query Match 37.6%; Score 1284; DB 16; Length 467;
Best Local Similarity 46.9%; Pred. No. 6e-82;
Matches 298; Conservative 36; Mismatches 101; Indels 200; Gaps 18;
Qy 16 LALLPAAATQ-----NRVLGKKGDTVELTCTASQKSIQPHW-----KNSN 57
Db 7 LALLLAVQVCAEVQALMQSGAEVKKPGEYSKISCKGS-GYSPFHWIAYVRQMGKGL 65

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Qy 58 QIKILGNOSGFLTKGPS---KLNDRADRSRL---WDQGNFPLIINKLIKEDSDPTIYCE 110
Db 66 WMGIIHPGASDTRSPSPFGQVITISADNSNSATYIQW-----SSLKASDTAMTYCA 116
Qy 111 VEDQKEEYQVLVFGLTANSDFHLLLOGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTL 170
Db 117 ---RQRELDYDPY-----WGQGLVTVSSASTKGPSVFPPLABSSKSTSGG-TAA 161
Qy 171 VSQLELDQSGTWTCTVLQNOKKVEFKIDIVLAFQKASSIYVKKEGEQVEFSPLAFTV 230
Db 162 LGCL-----VKQYFPEPYTVS 177
Qy 231 KLTVSGELMWQAEARASSSKSWITFDLKNKEVSVKRVTDPKLQMGKLLPLHLTLFQALPQ 290
Db 178 -----WMSGALTSG-----VH-TFPAVL-Q 195
Qy 291 YAGSGNLTLEAKTKGKLEHVEVNLVVMRATQIKNLTCVWGPTSPKMLSLKLENKAK 350
Db 196 SSGLSYSSSVTVFPSSSLGTQYI-----CNV----- 222
Qy 351 VSKREKRPVWVNLPEAGMMQCLSDSGOVLLESNIKVLPTWSTPVEPKSCDKHTTCCPCP 410
Db 223 ---NHRP-----SNTKV---DKKVEPKSCDKHTTCCPCP 251
Qy 411 PELLGGPSVFLPPPKKDTLMISRPEVTCVVVDVSHEDPEVKFNNYVDGVEVHNAKTKP 470
Db 252 PELLGGPSVFLPPPKKDTLMISRPEVTCVVVDVSHEDPEVKFNNYVDGVEVHNAKTKP 311
Qy 471 REEQNSTYRVVSVLTIVLHQMNLNGEKYCKVSNKALPAPIEKTISKAKGPREPQVYTL 530
Db 312 REEQNSTYRVVSVLTIVLHQMNLNGEKYCKVSNKALPAPIEKTISKAKGPREPQVYTL 371
Qy 531 PPSRDELTRKQVSLTCLVKGFPYSDIAVWESNGQPENNYKTTTPVLDSGSEFLYSKLT 590
Db 372 PPSRDELTRKQVSLTCLVKGFPYSDIAVWESNGQPENNYKTTTPVLDSGSEFLYSKLT 431
Qy 591 VDKSRMQQGNVFSQVMHEALHNHYTQKSLSLSPG 625
Db 432 VDKSRMQQGNVFSQVMHEALHNHYTQKSLSLSPG 466

RESULT 69
US-09-747-669-3
; Sequence 3, Application US/09747669
; Patent No. US20020122807A1
; GENERAL INFORMATION:
; APPLICANT: Dan, Michael D.
; APPLICANT: Saleh, Mansoor
; TITLE OF INVENTION: ANTIGEN BINDING FRAGMENTS, DESIGNATED
; TITLE OF INVENTION: 4B5 THAT SPECIFICALLY DETECT CANCER CELLS, NUCLEOTIDES
; TITLE OF INVENTION: ENCODING THE FRAGMENTS, AND USE THEREOF FOR THE PROPHYLAXIS
; TITLE OF INVENTION: AND DETECTION OF CANCERS
; FILE REFERENCE: 316082001001
; CURRENT FILING DATE: US/09/747,669
; CURRENT FILING DATE: 2002-04-08
; PRIOR APPLICATION NUMBER: US 09/111,286
; PRIOR FILING DATE: 1998-07-07
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 476
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-09-747-669-3

Query Match 37.6%; Score 1284; DB 9; Length 476;
Best Local Similarity 46.7%; Pred. No. 6,1e-82;
Matches 297; Conservative 35; Mismatches 110; Indels 194; Gaps 16;
Qy 16 LALLPAATQGNKV-----LGKKGDTVELTCTASQKSIQFH----- 52

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Qy 16 LALLPAATQGNKV-----LGKKGDTVELTCTASQKSIQFH----- 52

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Db 8 LFLVMAATSARSQVQLVQSGAEVKKPGASVKASCASGYFTFSFDLMVWRQAPQGLEMM 67
Qy 53 -WQNSNQIKILGNOSGFLTKGPSKLNDRADRSRLWDQGNFPLIINKLIKEDSDPTIYCEV 111
Db 68 GMMNPNSGK-----TGYAQKFGQVMTMTRTSIRTAI-WELSGLRSEDIVTYFCAR 117
Qy 112 EDQKEEYQVL--VFGLTANSDFHLLLOGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTL 169
Db 118 NADVENMAAIYHYGMD-----VMQGTTVTVSSASTKGPSVFPPLABSSKSTSGG-TA 169
Qy 170 VSQLELDQSGTWTCTVLQNOKKVEFKIDIVLAFQKASSIYVKKEGEQVEFSPLAFTV 229
Db 170 ALGCL-----VDYFPEPYTV 185
Qy 230 EKLTVSGELMWQAEARASSSKSWITFDLKNKEVSVKRVTDPKLQMGKLLPLHLTLFQALPQ 289
Db 186 S-----WMSGALTSG-----VH-TFPAVL- 203
Qy 290 QYAGSGNLTLEAKTKGKLEHVEVNLVVMRATQIKNLTCVWGPTSPKMLSLKLENKAK 349
Db 204 QSSGLYSLSVTVFPSSSLGTQYI-----CNV----- 231
Qy 350 VSKREKRPVWVNLPEAGMMQCLSDSGOVLLESNIKVLPTWSTPVEPKSCDKHTTCCPCP 409
Db 232 ---NHRP-----SNTKV---DKKVEPKSCDKHTTCCPCP 259
Qy 410 APELLGGPSVFLPPPKKDTLMISRPEVTCVVVDVSHEDPEVKFNNYVDGVEVHNAKTK 469
Db 260 APELLGGPSVFLPPPKKDTLMISRPEVTCVVVDVSHEDPEVKFNNYVDGVEVHNAKTK 319
Qy 470 PREEQNSTYRVVSVLTIVLHQMNLNGEKYCKVSNKALPAPIEKTISKAKGPREPQVYTL 529
Db 320 PREEQNSTYRVVSVLTIVLHQMNLNGEKYCKVSNKALPAPIEKTISKAKGPREPQVYTL 379
Qy 530 LPPSRDELTRKQVSLTCLVKGFPYSDIAVWESNGQPENNYKTTTPVLDSGSEFLYSKLT 589
Db 380 LPPSRDELTRKQVSLTCLVKGFPYSDIAVWESNGQPENNYKTTTPVLDSGSEFLYSKLT 439
Qy 590 TVDKSRMQQGNVFSQVMHEALHNHYTQKSLSLSPG 625
Db 440 TVDKSRMQQGNVFSQVMHEALHNHYTQKSLSLSPG 475

RESULT 70
US-10-290-703-3
; Sequence 3, Application US/10290703
; Publication No. US20030118593A1
; GENERAL INFORMATION:
; APPLICANT: Dan, Michael D.
; APPLICANT: Saleh, Mansoor
; TITLE OF INVENTION: ANTIGEN BINDING FRAGMENTS, DESIGNATED
; TITLE OF INVENTION: 4B5 THAT SPECIFICALLY DETECT CANCER CELLS, NUCLEOTIDES
; TITLE OF INVENTION: ENCODING THE FRAGMENTS, AND USE THEREOF FOR THE PROPHYLAXIS
; TITLE OF INVENTION: AND DETECTION OF CANCERS
; FILE REFERENCE: 316082001002
; CURRENT FILING DATE: US/10/290,703
; CURRENT FILING DATE: 2002-11-08
; PRIOR APPLICATION NUMBER: US 09/747,669
; PRIOR FILING DATE: 2000-12-21
; PRIOR APPLICATION NUMBER: US 09/111,286
; PRIOR FILING DATE: 1998-07-07
; PRIOR APPLICATION NUMBER: US 60/051,945
; PRIOR FILING DATE: 1997-07-08
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 476
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-290-703-3

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US-10-290-703-3

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Query Match      37.6%; Score 1284; DB 14; Length 476;
Best Local Similarity 46.7%; Pred. No. 6,1e-82;
Matches 297; Conservative 35; Mismatches 110; Indels 194; Gaps 16;

QY 16 LALLPAAATGCKNV-----LGGKGDVLELTCTASQKSIQFH-----52
DB 8 LFLVMAATARSQVQLVQSGAEVKKPGASVKSCAKSGYFTSFIDLMMVWQAPQGLLEWM 67
QY 53 -WNSNQIKLGNQSFLLTKGPKSLNDRADSRSLMDQGNFPLIINKIKIEDSDTYICEV 111
DB 68 GMMNPSPGK-----TGYAQKFGGRVTMTNTSIRIAY-MELGSLSEDTAVYFCAR 117
QY 112 EDOKEEVOL--VFGLTANSDFTHLQSQSLTTLTSPSSPSVQCRSPRGKNIQSGKTL 169
DB 118 NADNVEMAAIYHYGMD-----VWGQGTIVVSSASTGSPVFLPAPSSTSGG-TA 169
QY 170 SVSQLELDQSGTWTCTVLONQKVEFKIDIVLAFQKASIVYKKEGEQVEFSFPLAFTV 229
DB 170 ALQCL-----VKDYFPEPVTY 185
QY 230 EKLTSGELMWOABRASSKSWITFDLKKEVSVKRVTDQPKLQMGKLP.LHLTLPEALP 289
DB 186 S-----WNSGALTSG-----VH-TFPAVL- 203
QY 290 QVAGSGLTLALEAKTGKTLHQEVNLVWMATOLQKMLTCEVMGPTSPKMLSLKLENKA 349
DB 204 QSSGLVSLSSVTVPESSLSGTQTYI-----CNV-----231
QY 350 KVKREKPVWVLNPEAGMOCCLSDSGVLLSNIKVLPTWSTPVEPKSCDKTHTCPCP 409
DB 232 ---NHKP-----SNTKV---DKVFPKSCDKTHTCPCP 259
QY 410 APELLGSPSVLEPPPKKDTLMTSRPEVTCVVVDVSHEDPEVKFMWYDGVENHAKTK 469
DB 260 APELLGSPSVLEPPPKKDTLMTSRPEVTCVVVDVSHEDPEVKFMWYDGVENHAKTK 319
QY 470 PREEQNSTYRVSVLTVLHQMVLNGKEYCKVSNKALPAPIEKITSKAKGQPREQVYT 529
DB 320 PREEQNSTYRVSVLTVLHQMVLNGKEYCKVSNKALPAPIEKITSKAKGQPREQVYT 379
QY 530 LPPSRDELTKNOVSLTCLYKGFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYSKL 589
DB 380 LPPSRDELTKNOVSLTCLYKGFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYSKL 439
QY 590 TVDKSRMGOQGNVFCSCVMHEALHNHYTKSLSPG 625
DB 440 TVDKSRMGOQGNVFCSCVMHEALHNHYTKSLSPG 475

RESULT 71
US-10-378-567-2
; Sequence 2, Application US/10378567
; Publication No. US20040006208A1
; GENERAL INFORMATION:
; APPLICANT: KARPUSAS, MICHAEL
; APPLICANT: HSU, YEN-MING
; APPLICANT: TAYLOR, FREDERICK R.
; APPLICANT: ZHENG, ZHONGLI
; TITLE OF INVENTION: CO-CRYSTAL STRUCTURE OF MONOCLONAL ANTIBODY 5C8 AND
; FILE REFERENCE: A096CON1
; CURRENT APPLICATION NUMBER: US/10/378,567
; PRIOR FILING DATE: 2003-02-28
; PRIOR APPLICATION NUMBER: PCT/US01/27352
; PRIOR FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: 60/276,452
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: 60/229,933
; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 448

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; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: humanized 5c8 heavy chain amino acid
US-10-378-567-2

Query Match      37.6%; Score 1283.5; DB 15; Length 448;
Best Local Similarity 47.9%; Pred. No. 6,1e-82;
Matches 293; Conservative 39; Mismatches 97; Indels 183; Gaps 17;

QY 25 GNRVVLGKKGDVLELTCTASQK--KSIQFMNNSNQIKLGNQ--SFL-----TKGPKSL 76
DB 8 GAEV--KRGASVSKSCASGYIFTSYMYW-----VQAPOQGLEWIGEINPSGDTNF 60
QY 77 NDRADSRSLW--DQGNFPLIINKIKIEDSDTYICEVEDQKEVQLVFGTLANSDFTHL 133
DB 61 NEKFKSKATLVTDKASASTAYMELSLRSEDTAVVYCTRSDDGNDMD-----106
QY 134 LOGQSULTLTPSSPSVQCRSPRGKNIQSGKTLVSQLELDQSGTWTCTVLONQKV 193
DB 107 SWGQGTIVVSSASTGSPVFLPAPSSTSGG-TAALQCL-----146
QY 194 EFKIDIVLAFQKASIVYKKEGEQVEFSFPLAFTVEKLTGSGELMWOABRASSKSWIT 253
DB 147 -----VKDYFPEPVTY-----WNSGALTSG-----167
QY 254 FDLKKEVSVKRVTDQPKLQMGKLP.LHLTLPEALPQVAGSGLTLALEAKTGKTLHQEVN 313
DB 168 -----VH-TFPAVL-QSSGLVSLSSVTVPESSLSGTQTY 199
QY 314 LVWMATOLQKMLTCEVMGPTSPKMLSLKLENKAISKREKPVWVLNPEAGMOCCLIS 373
DB 200 I-----CNV-----NHKP-----207
QY 374 DSGQVLLSNIKVLPTWSTPVEPKSCDKTHTCPCPAPPELLGSPSVLEPPPKKDTLMTS 433
DB 208 -----SNTKV---DKVFPKSCDKTHTCPCPAPPELLGSPSVLEPPPKKDTLMTS 255
QY 434 RPEVTCVVVDVSHEDPEVKFMWYDGVENHAKTKPREEQNSTYRVSVLTVLHQMVL 493
DB 256 RPEVTCVVVDVSHEDPEVKFMWYDGVENHAKTKPREEQNSTYRVSVLTVLHQMVL 315
QY 494 NGKEYCKVSNKALPAPIEKITSKAKGQPREQVYTLTPSRDELTKNOVSLTCLYKGFY 553
DB 316 NGKEYCKVSNKALPAPIEKITSKAKGQPREQVYTLTPSRDELTKNOVSLTCLYKGFY 375
QY 554 SDIAVEMESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRMGOQGNVFCSCVMHEALHN 613
DB 376 SDIAVEMESNGQPENNYKTPPVLDSDGSFFLYSKLTVDKSRMGOQGNVFCSCVMHEALHN 435
QY 614 HYTQKSLSPG 625
DB 436 HYTQKSLSPG 447

RESULT 72
US-10-207-655-396
; Sequence 396, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden-Ledbetter, Martha S.
; TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
; FILE REFERENCE: 390069.401C1
; CURRENT APPLICATION NUMBER: US/10/207,655
; CURRENT FILING DATE: 2002-07-25
; NUMBER OF SEQ ID NOS: 426
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 396
; LENGTH: 500
; TYPE: PRT
; ORGANISM: Artificial Sequence

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; FEATURE: fusion polypeptide
; OTHER INFORMATION:
US-10-207-655-396

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Query Match	Score	DB	Length
37.6%	1283	14	500

Best Local Similarity 48.9%; Pred. No. 7.7e-82;

Matches 299; Conservative 37; Mismatches 128; Indels 148; Gaps 18;

Qy	22	TOGNKVLLKKGPVLELCTCTTASOKKSIOQPHWKNUNQIILNQGSLFLTKGSLKUNDPADS	82
Db	27	SQSPAILLSSPGEKVTMTCTCRASSVS-YMWTQOQK-----QSSPKPMIYAPSNLSSGVA	81
Qy	83	RRLSLMDQG-NFPLIINKLTIEDSDPYICEVEDOKEEVOLLVFGHLTANSDFHLLQGOSSLT	141
Db	82	RFGSGSGSSTYSLTISRVEADDAATFYQ-----QMSFNPPPT--GAQTKL	125
Qy	142	TLESPPGSSPSVOCNSPRKNIQGGKTLSSVQLELODSGTYCTTVLQNOKKVEKIDIV	201
Db	126	ELMDGGGSG-----GGSGGGGGS--SQAYLQOGA-----ELV-156	
Qy	202	LAFQKASITVYKKEGEVEFSPFLAFVTEKLTG-----SGELMWOAERASSSKWITFDLK	257
Db	157	-----RFGASVVMSC-----KASGYTFTSYNMHWYKQTPROGLEMTG----	193
Qy	258	NKEVSVKRVTODPKLQMGKKLPLHLTPOLPQVYAGSGLTLALEAKTKLHDEVNLVM	317
Db	194	-----AIVPGNDTSYNQKFK-GK-----211	
Qy	318	RATQLOKMLTCEVWGPSTPKMLSLKLENKE---AKYSKREKRVVYLVNPPAGMWOCLLS	373
Db	212	-----ATLTVDKSSSTAYMQSLSTISEASAYFCARVYVYNSNSYWFDP-----WV-----256	
Qy	374	DSGOVLLESNIKVLPMSTPVEPKSCDKTHTCTPCPAPABELIGSPVLEFPKPKDTLMIS	433
Db	257	GTCFTV-----TVSSDQPKSPSKDKHTHCPCPAPABELIGSPVLEFPKPKDTLMIS	307
Qy	434	RTEPVTCVVYVDSHEDPEVKFWVYVDGEVHNAAKTPREEOJNSTYRVVSYLVYLHODWL	493
Db	308	RTEPVTCVVYVDSHEDPEVKFWVYVDGEVHNAAKTPREEOJNSTYRVVSYLVYLHODWL	367
Qy	494	NGREYKCKVSNKALPAPIEKTISKAGOREPOVYTLTPSSDELTKNOVSLTCLVKGFPY	553
Db	368	NGREYKCKVSNKALPAPIEKTISKAGQPREPOVYTLTPSSDELTKNOVSLTCLVKGFPY	427
Qy	554	SDIAVEMESNGQENNNYKTPVPLVDSGFFLYSKLTVDKSRMOQGNVFSCSVNHEALHN	613
Db	428	SDIAVEMESNGQENNNYKTPVPLVDSGFFLYSKLTVDKSRMOQGNVFSCSVNHEALHN	487
Qy	614	HYTQKSLSLSPG	625
Db	488	HYTQKSLSLSPG	499

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RESULT 73
US-10-207-655-397
: Sequence 397, Application US/10207655
: Publication No. US20030118592A1
GENERAL INFORMATION:
APPLICANT: Ledbetter, Jeffrey A.
APPLICANT: Hayden-Ledbetter, Martha S.
TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
FILE REFERENCE: 390069.401C1
CURRENT APPLICATION NUMBER: US/10/207,655
CURRENT FILING DATE: 2002-07-25
NUMBER OF SEQ ID NOS: 426
SOFTWARE: PatentIn version 3.0
SEQ ID NO 397
LENGTH: 500
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: fusion polypeptide
US-10-207-655-397

```

Query Match	37.6%;	Score 1283;	DB 14;	Length 500;
Best Local Similarity	48.9%;	Pred. NO. 7.7e-82;		
Matches 299;	Conservative 37;	Mismatches 128;	Indels 148;	Gaps 18;

Qy	22	TOGNNKVVLLKKGPJTEVLEFCTAAGKKSIOFPHWNNSNOJIKILDNQSGFLFKGSKLNRBADS	82
Db	27	SGSPAILLSSPGEKMTMTCRASSISV-YMHNYQOKP-----GSSKPMIYAPBSNLASGVA	81
Qy	83	RRSLMDQG-NPRLIIKNLKIETEDSTYICEVEDQKEQVLLVGLTANSNDHLLQGSGTLT	141
Db	82	RFGSGSGSTISLTSISRVAEDDAATYYCQ-----QWSFNPFTE--GAGTKL	125
Qy	142	TLESPPGSSPSVQCSPRGKNIOGKRTISVSQLELOBSGTWTCVUNQNKVEREKIDIVY	201
Db	126	ELKDGGGSG-----GGSGGGGGS--SQAVYLDQSGA-----ELV-156	
Qy	202	LAFQKASSIYVKKEGBOYEFPLAFVTEKLTG-----SGELMDOERASSSKSWITFDLK	257
Db	157	-----RPGASVVMSC-----KASGTFITSYNNHWKQTPROGLEWIG-----153	
Qy	258	NKEVSKVKTODPKLQMGKCLPLHLTPOLPQVAGSGLTLALEATGKIHQENVLVM	317
Db	194	-----AIVPGNDITSYNOKFK-GK-----211	
Qy	318	RATQLOKNTLCEWGPPTSPKMLSLKLENKE-----AKVSKREKRVWVLNRPAGMWOCLLS	373
Db	212	-----ATLTVDSASTAYMOJSLTSHEDSAVIFCARVVIYSNSYWFDP-----TW-----256	
Qy	374	DSGQVLLBSNIIKVLPTWSTIPVEPRKSCDXTHTCPCPAPELLGGSVFLFPKPMDTLNIS	433
Db	257	GTGTVT-----TVSDDGPKSCDXTHTSPCPAPELLGGSVFLFPKPMDTLNIS	307
Qy	434	RTEVTCVVVVDVSHEDPEYKFWMYIDYGVENNAKTKPREBOYNSTRYVSVLTYLHDDWL	493
Db	308	RTEVTCVVVVDVSHEDPEYKFWMYVDGVENNAKTKPREBOYNSTRYVSVLTYLHDDWL	357
Qy	494	NGEYKCYKSNKALPAPIEKITSKAGQPREPOVYTLPPSDELTNNOVSLTCLVKGFYP	553
Db	368	NGEYKCYKSNKALPAPIEKITSKAGQPREPOVYTLPPSDELTNNOVSLTCLVKGFYP	427
Qy	554	SDIAVEMESNGOPENNYYKTTPEVLDDSDGSFPLYSKLTVDKSRMOQGVNFCSVYMEHALN	613
Db	428	SDIAVEMESNGOPENNYYKTTPEVLDDSDGSFPLYSKLTVDKSRMOQGVNFCSVYMEHALN	487
Qy	614	HYTQKSLSPG 625	
Db	488	HYTQKSLSPG 499	

```

RESULT 74
US-10-207-655-398
; Sequence 398: Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden-Ledbetter, Martha S.
; TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
; FILE REFERENCE: 390069, 401CI
; CURRENT APPLICATION NUMBER: US/10/207,655
; CURRENT FILING DATE: 2002-07-25
; NUMBER OF SEQ ID NOS: 426
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 398
; LENGTH: 500
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion polypeptide
US-10-207-655-398

Query Match      37.6%; Score 1283; DB 14; Length 500;
Best Local Similarity 48.9%; Pred. No. 7,7e-82;

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; SEQ ID NO 6
; LENGTH: 497
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-683-255-6
```

```

Query Match
Best Local Similarity 37.5%; Score 1281.5; DB 12; Length 497;
68.1%; Pred. No. 9.8e-82;
Matches 258; Conservative 22; Mismatches 53; Indels 46; Gaps 6;
```

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QY 293 GSGNLTALAEAKTKLHQ--EVLNVMBATQLOKNL--TCEVWGPTSPKMLSLKLE-- 345
DB 118 GSINHTYQLDVVERSPHRPILOAGLDPANKTVAGLSVVEFWCKYSDPOQHIOMLKHIEVN 177
QY 346 -----NKEAKYSKREKPVWVLN-----PEAGMOCCLSDS-----CQ 377
DB 178 GSKIGPDNLPHYQILKTAGVNTTDKEMEVLHLRNVSFEDAGEYTCLAGNSIGLSHHSAML 237
QY 378 VLLESNIKVLPTWSTPV-----EPKSCDTHTCPCPCPAPPELLGSPVFLFPPKP 426
DB 238 TVLEALEERPAVMTSPLYLEGSGSPGLQEPKSCDTHTCPCPAPPELLGSPVFLFPPKP 297
QY 427 KDTLMIISRTPEVTCVVDVSHEDPEVKFMVYDGEVHNAAKTKPREEOYNSTRVVSVL 486
DB 298 KDTLMIISRTPEVTCVVDVSHEDPEVKFMVYDGEVHNAAKTKPREEOYNSTRVVSVL 357
QY 487 VLHODWLNKEKYCKKSNKALPAPIEKTISKAKGPREPOVYTLPPSRDELTKNOVSLTC 546
DB 358 VLHODWLNKEKYCKKSNKALPAPIEKTISKAKGPREPOVYTLPPSRDELTKNOVSLTC 417
QY 547 LVKGFPSDIAVEMESNGOPENNYYKTTTPVLDSGSPFLYSKLTVDKSRMOOGNVPSCSV 606
DB 418 LVKGFPSDIAVEMESNGOPENNYYKTTTPVLDSGSPFLYSKLTVDKSRMOOGNVPSCSV 477
QY 607 MHEALHNHYTKSLSLSPG 625
DB 478 MHEALHNHYTKSLSLSPG 496
```

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RESULT 79
US-10-683-255-4
; Sequence 4, Application US/10683255
; Publication No. US20040063910A1
; GENERAL INFORMATION:
; APPLICANT: Kavanaugh, William M.
; APPLICANT: Ballinger, Marcus
; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
; FILE REFERENCE: RECEPTOR-IMMUNOGLOBULIN FUSION
; CURRENT APPLICATION NUMBER: US/10/683,255
; CURRENT FILING DATE: 2003-10-10
; PRIOR APPLICATION NUMBER: 09/499,846
; PRIOR FILING DATE: 2000-02-07
; PRIOR APPLICATION NUMBER: 60/119,002
; PRIOR FILING DATE: 1999-02-08
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FaastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 525
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-683-255-4
```

```

Query Match
Best Local Similarity 37.5%; Score 1281.5; DB 12; Length 525;
68.1%; Pred. No. 1.1e-81;
Matches 258; Conservative 22; Mismatches 53; Indels 46; Gaps 6;
```

```

QY 293 GSGNLTALAEAKTKLHQ--EVLNVMBATQLOKNL--TCEVWGPTSPKMLSLKLE-- 345
DB 146 GSINHTYQLDVVERSPHRPILOAGLDPANKTVAGLSVVEFWCKYSDPOQHIOMLKHIEVN 205
QY 346 -----NKEAKYSKREKPVWVLN-----PEAGMOCCLSDS-----CQ 377
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DB 206 GSKIGPDNLPHYQILKTAGVNTTDKEMEVLHLRNVSFEDAGEYTCLAGNSIGLSHHSAML 265
QY 378 VLLESNIKVLPTWSTPV-----EPKSCDTHTCPCPCPAPPELLGSPVFLFPPKP 426
DB 266 TVLEALEERPAVMTSPLYLEGSGSPGLQEPKSCDTHTCPCPAPPELLGSPVFLFPPKP 325
QY 427 KDTLMIISRTPEVTCVVDVSHEDPEVKFMVYDGEVHNAAKTKPREEOYNSTRVVSVL 486
DB 326 KDTLMIISRTPEVTCVVDVSHEDPEVKFMVYDGEVHNAAKTKPREEOYNSTRVVSVL 385
QY 487 VLHODWLNKEKYCKKSNKALPAPIEKTISKAKGPREPOVYTLPPSRDELTKNOVSLTC 546
DB 386 VLHODWLNKEKYCKKSNKALPAPIEKTISKAKGPREPOVYTLPPSRDELTKNOVSLTC 445
QY 547 LVKGFPSDIAVEMESNGOPENNYYKTTTPVLDSGSPFLYSKLTVDKSRMOOGNVPSCSV 606
DB 446 LVKGFPSDIAVEMESNGOPENNYYKTTTPVLDSGSPFLYSKLTVDKSRMOOGNVPSCSV 505
QY 607 MHEALHNHYTKSLSLSPG 625
DB 506 MHEALHNHYTKSLSLSPG 524
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RESULT 80
US-10-207-655-346
; Sequence 346, Application US/10207655
; Publication No. US20030118592A1
; GENERAL INFORMATION:
; APPLICANT: Ledbetter, Jeffrey A.
; APPLICANT: Hayden-Ledbetter, Martha S.
; TITLE OF INVENTION: BINDING DOMAIN-IMMUNOGLOBULIN FUSION PROTEINS
; FILE REFERENCE: 390069.401C1
; CURRENT APPLICATION NUMBER: US/10/207,655
; CURRENT FILING DATE: 2002-07-25
; NUMBER OF SEQ ID NOS: 426
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 346
; LENGTH: 543
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion polypeptide
US-10-207-655-346
```

```

Query Match
Best Local Similarity 37.5%; Score 1281; DB 14; Length 543;
46.9%; Pred. No. 1.2e-81;
Matches 300; Conservative 43; Mismatches 116; Indels 180; Gaps 17;
```

```

QY 1 MNRGVPRHLLLVLTQALLPAPATQGNKVLGKKGDVTELTCTASQKKSIOFHMKNSNOIK 60
DB 19 MSRGVD-----IVL-----TQSPPTTASPGKRVITTCRASSSVSTMYWYQOKS--- 62
QY 61 ILGNQSFLLTKGPSKLNDRADSRRLMDQG--NPLIINKLKIEDSDTYICEVEDQKEEVO 119
DB 63 --GASPKMIYDTSLAGSVNPRFSGSGSGTSYSLAINTMREDAATYYCQ----- 111
QY 120 LILVGLTANSDTHLLQGGSLVLTLESPPGSSPSVQCRSPRKNIGQKTLVSQLELQDS 179
DB 112 -----QWSTPPLTF-----GSGTKLEIKRGGGSGGSGGSGGVOLKXA 152
QY 180 G-----TWCTVVLONQKKVEFKIDIVLVAQKASSIYKKEGQVRESFPLAFIV 229
DB 153 GPGALVOPQTSLSLTCTV-----SGFS----- 173
QY 230 EKLTTSGSELMOAERASSKSWITFDLNKEVSVKRVTPQPLQWGXKLPLHLTPPALP 289
DB 174 --LTSDGVYH-----INQRP-----GKGLW-----MGII 196
QY 290 QYASGNLTALAEATGKLHDEVLNVMBATQLOKNLTCBVWGPTSPKMLSLKLENKEA 349
DB 197 YVDGDTYNSAIKSR-----LSISRDS-----KSOVFLKINSIQ- 231
QY 350 KYSKREKPVWVLNPEAGMOCCL--LSDSGVLESNIKVLPTWSTPVPEKSCDTHTCPC 406
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Db      222 -----TDDTAMYYCARIHFDYWGQ-----GVMWTYSSDLEPKSSDKHTSP 272
Qy      407 PCPAPELLGGPSVFLPFPKPKDITLMIISRTPEVTCVAVDVSHEDPEVKNMWYVDGVEVNA 466
Db      273 PSPAPELLGGSSVFLPFPKPKDITLMIISRTPEVTCVAVDVSHEDPEVKNMWYVDGVEVNA 332
Qy      467 KTKPREOYNSTRYVSVLTVLHODMLNGKEYCKCVSNKALPAPIEKTISKAKGQPREPQ 526
Db      333 KTKPREOYNSTRYVSVLTVLHODMLNGKEYCKCVSNKALPAPIEKTISKAKGQPREPQ 392
Qy      527 VYTLPPSDELTAKNOVSLTCLVKGFPSPDIAMWESNGQPENNYKTTTPVLDSDGSFPLY 586
Db      393 VYTLPPSDELTAKNOVSLTCLVKGFPSPDIAMWESNGQPENNYKTTTPVLDSDGSFPLY 452
Qy      587 SKLTVDKSRMOQGNVFCSCVMHEALHNNHYTOKSLSLSPG 625
Db      453 SKLTVDKSRMOQGNVFCSCVMHEALHNNHYTOKSLSLSPG 491

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RESULT 81
US-10-320-231A-79
; Sequence 79, Application US/10320231A
; Publication No. US20030194405A1
; GENERAL INFORMATION:
; APPLICANT: Neben, Steven
; APPLICANT: Takeuchi, Toshihiko
; APPLICANT: Tomkinson, Adrian
; TITLE OF INVENTION: Antibody Inhibiting Stem Cell Factor Activity And Use For
; TITLE OF INVENTION: Treatment Of Asthma
; FILE REFERENCE: 7430*163
; CURRENT APPLICATION NUMBER: US/10/320,231A
; CURRENT FILING DATE: 2002-12-19
; PRIOR APPLICATION NUMBER: US 60/342,174
; PRIOR FILING DATE: 2001-12-17
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: Patent version 3.2
; SEQ ID NO 79
; LENGTH: 445
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: synthetic sequence
US-10-320-231A-79

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Query Match      37.4%; Score 1278.5; DB 14; Length 445;
Best Local Similarity 48.1%; Pred. No. 14e-81;
Matches 295; Conservative 35; Mismatches 90; Indels 193; Gaps 17;

Qy      30 LKKKGDVLELTCTAS-----QKKSIOFHMKNSNOIKILGNQSF-----TKG 72
Db      8 LVQPGSIRLSCAAGFTFFSSYAMGVMVQAPGKLEWISA-----ISGSGSYYVADVSKG 63
Qy      73 PSKLNDRADRSRLSDQGNFPIILIKLKIEDSDTYICEVEDQKEVQLLVGLTANSTH 132
Db      64 RFTIS-RNNSKNTLYLQNM-----SLRAEDTAVVYCARD-----FFAHFP-- 103
Qy      133 LLQGSILTLTLESPGSSPSVOCSPRGKNIGGKTLISVQLELDSDGTMCTVYLQNK 192
Db      104 -VMGGTLYTVSASTKGSVFLPAPSSTSGG-TAALGCL----- 143
Qy      193 VEFKIDIVLAFQKASSIYVKKGEQVEFSPPLAFVTEKLTGSGELMWQAERASSSKSMI 252
Db      144 -----VKDYFPEPYTVS-----WNSGALTSG----- 164
Qy      253 TFDLKNKEVSVKRVTDQPKLQMGKPLHLTLPOLPYAASGNITLAEKATGKLHDEV 312
Db      165 -----VH-TFPAVL-QSSGLYSLSSVTVVTPSSSLGTQTY-- 195
Qy      313 NLVVMRATQLOKNTLCEVWGFTSPKLMSTLKENKAIVSKREKPVWVTLNPEAGWQCL 372
Db      196 YI-----CNV-----NHRP----- 204

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Qy      373 SDSGQVLLSNIKVLPTWSTPVEBKSCDKTHTCPCPAPELLGGPSVFLPFPKPKDITLMI 432
Db      205 -----SWTKV-----DKVEPKSCDKTHTCPCPAPELLGGPSVFLPFPKPKDITLMI 251
Qy      433 SRTPEVTCVAVDVSHEDPEVKFMWYVDGVEVNAKTKPREOYNSTRYVSVLTVLHODW 492
Db      252 SRTPEVTCVAVDVSHEDPEVKFMWYVDGVEVNAKTKPREOYNSTRYVSVLTVLHODW 311
Qy      493 LNKGEYCKCVSNKALPAPIEKTISKAKGQPREPQVYTLPSRDELTAKNOVSLTCLVKGFPY 552
Db      312 LNKGEYCKCVSNKALPAPIEKTISKAKGQPREPQVYTLPSRDELTAKNOVSLTCLVKGFPY 371
Qy      553 PSDIAMEWESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRMOQGNVFCSCVMHEALH 612
Db      372 PSDIAMEWESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRMOQGNVFCSCVMHEALH 431
Qy      613 NHYTOKSLSLSPG 625
Db      432 NHYTOKSLSLSPG 444

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RESULT 82
US-10-138-727A-41
; Sequence 41, Application US/10138727A
; Publication No. US20030157054A1
; GENERAL INFORMATION:
; APPLICANT: Gillies, Stephen
; APPLICANT: Lo, Kin-Ming
; APPLICANT: Qian, Susan
; TITLE OF INVENTION: Recombinant Tumor Specific Antibody And Use Thereof
; FILE REFERENCE: LEX-019
; CURRENT APPLICATION NUMBER: US/10/138,727A
; CURRENT FILING DATE: 2002-05-03
; PRIOR APPLICATION NUMBER: US 60/288,564
; PRIOR FILING DATE: 2001-05-03
; NUMBER OF SEQ ID NOS: 42
; SOFTWARE: Patent version 3.0
; SEQ ID NO 41
; LENGTH: 579
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: heavy chain-IL2
US-10-138-727A-41

```

```

Query Match      37.4%; Score 1278.5; DB 14; Length 579;
Best Local Similarity 47.3%; Pred. No. 2e-81;
Matches 299; Conservative 37; Mismatches 93; Indels 203; Gaps 18;

Qy      32 KKGDTVELTCTASQKKSIOF--HMKNSNOIKILGNQ--SFLTGPSPKLNDRADRSRLW 87
Db      13 KPGSTVXISCAAGSYTFTNVMVQKQPGKLEWIMINTYTGEFTYADD----- 63
Qy      88 DQGNFP-----LIINKLKIEDSDTYICEVEDQKEVQLLVGLTANSTH 136
Db      64 FKGFAPASLETSTSTAFLOINNLASEDTATYFC-----VREISKG-----DYWGQ 109
Qy      137 OSLLTLTLESPGSSPSVOCSPRGKNIGGKTLISVQLELDSDGTMCTVYLQNKVEFK 196
Db      110 TSVTVSASTSG--PSVFLPAPSSTSGG-TAALGCL----- 144
Qy      197 IDIVLAFQKASSIYVKKGEQVEFSPPLAFVTEKLTGSGELMWQAERASSSKSMITFDL 256
Db      145 -----VKDYFPEPYTVS-----WNSGALTSG----- 165
Qy      257 KNKEVSVKRVTDQPKLQMGKPLHLTLPOLPYAASGNITLAEKATGKLHDEVNLV 316
Db      166 -----VH-TFPAVL-QSSGLYSLSSVTVVTPSSSLGTQTY-- 198
Qy      317 MRATQLOKNTLCEVWGFTSPKLMSTLKENKAIVSKREKPVWVTLNPEAGWQCLSDSG 376
Db      199 -----CNV-----NHRP----- 205

```

```
Qy 377 QVLBSNLIKVLPTWSTPVEPKSCDKTHTCTPCPAPELLGGPSVFLPPKQDTLMISRT 436
Db 206 -----SNTKV-----DKRVEPKSCDKTHTCTPCPAPELLGGPSVFLPPKQDTLMISRT 256
Qy 437 EYTCVAVDVSHEDPEVKFMVYDGVGVNAKTPREEOYNSTTRVSVLTVLHODLNK 496
Db 257 EYTCVAVDVSHEDPEVKFMVYDGVGVNAKTPREEOYNSTTRVSVLTVLHODLNK 316
Qy 497 EYKCKVSNKALPAPIEKTSKAGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDI 556
Db 317 EYKCKVSNKALPAPIEKTSKAGQPREPOVYTLPPSRDEMTNQVSLTCLVKGFYPSDI 376
Qy 557 AYWEBSNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRMQGNVSCSVMHEALHNYT 616
Db 377 AYWEBSNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRMQGNVSCSVMHEALHNYT 436
Qy 617 OKSLSPG-----IQLDCTCAEQ 636
Db 437 OKSLSPGKAPTSSTSKKTQLQLEHLLDLQ 468

RESULT 83
US-10-108-260A-4282
; Sequence 4282, Application US/10108260A
; Publication No. US20040005560A1
; GENERAL INFORMATION:
; APPLICANT: HELIX RESEARCH INSTITUTE
; TITLE OF INVENTION: No. US20040005560A1a1 full length cDNA
; FILE REFERENCE: H1-A0106
; CURRENT APPLICATION NUMBER: US/10/108,260A
; NUMBER OF SEQ ID NOS: 5458
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4282
; LENGTH: 474
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-108-260A-4282

Query Match 37.4%; Score 1278; DB 15; Length 474;
Best Local Similarity 51.9%; Pred. No. 1,6e-81;
Matches 289; Conservative 32; Mismatches 92; Indels 144; Gaps 15;

Qy 120 LTVFGTANSDTHLQ--GQSLTLTLESPPGSSPSVOCRS----- 157
Db 10 LLAIVAGANSQAQLDSGEV-----RKGGASVYKSCASGDFTRDFLQWROAGQGL 64
Qy 158 -----PRG-----KNIQGGKTL-----VSQLELDGSGTWTCLQNKV 193
Db 65 EWMGFIDPSGSGTLVQNFGQRTVTRERSTTVVWELSLKSEDPATVFCGGSVN---- 120
Qy 194 EKKIDIVLAFQKASSIVYKKEGEQVEFSFPLAFYVEKLTGSG--ELMWQKERSSSGS 250
Db 121 -----IVSTTSGDDPDDLWGGGTVVVSSA 145
Qy 251 WITFDLKNKEVSKRVTDPKLQMGKKPLHLTLQALFOYAGSGNLTLALAKTKGLHQ 310
Db 146 -----STGPFVFPFLAPSSKSTSGSTALGCLVDYFE-----PVTVMNNGALTS 192
Qy 311 EYNL--VVMRATQLOKGLTCEVWGPTSPKLMSLKLENKAAVSKREKFPVWLNPEAGMW 368
Db 193 GVHTFPVAVLQSSGLV--SLSSVTVTPSS-----SLGQTYICNVN--HKF----- 233
Qy 369 QCLLSDSGVLLSNIKVLPTWSTPVEPKSCDKTHTCTPCPAPELLGGPSVFLPPKPKD 428
Db 234 -----SNTKV-----DKKVEPKSCDKTHTCTPCPAPELLGGPSVFLPPKPKD 276
Qy 429 TLMISTPEVTCVAVDVSHEDPEVKFMVYDGVGVNAKTPREEOYNSTTRVSVLTVL 488
Db 277 TLMISTPEVTCVAVDVSHEDPEVKFMVYDGVGVNAKTPREEOYNSTTRVSVLTVL 336
Qy 489 HODWLNGEKYKCKVSNKALPAPIEKTSKAGQPREPOVYTLPPSRDELTKNQVSLTCLV 548
Db 489 HODWLNGEKYKCKVSNKALPAPIEKTSKAGQPREPOVYTLPPSRDELTKNQVSLTCLV 548
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Db 337 HODWLNGEKYKCKVSNKALPAPIEKTSKAGQPREPOVYTLPPSRDELTKNQVSLTCLV 396
Qy 549 KGFYPSDLAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRMQGNVSCSVMH 608
Db 397 KGFYPSDLAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRMQGNVSCSVMH 456
Qy 609 EALHNHYTQKSLSPG 625
Db 457 EALHNHYTQKSLSPG 473

RESULT 84
US-10-107-991B-3
; Sequence 3, Application US/10107991B
; Publication No. US20040058445A1
; GENERAL INFORMATION:
; APPLICANT: LEDBETTER, JEFFREY
; APPLICANT: HAYDEN-LEDBETTER, MARTHA
; APPLICANT: HELSTROM, INGEGARD
; APPLICANT: HELSTROM, KARL ERIK
; TITLE OF INVENTION: ACTIVATION OF TUMOR-REACTIVE LYMPHOCYTES VIA ANTIBODIES
; FILE REFERENCE: 034474.0004
; CURRENT APPLICATION NUMBER: US/10/107,991B
; PRIOR FILING DATE: 2002-03-26
; PRIOR APPLICATION NUMBER: 60/286,585
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PatentIn version 2.1
; SEQ ID NO 3
; LENGTH: 555
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Mouse-Human Fusion Protein
; NAME/KEY: SIGNAL
; LOCATION: (1)..(23)
; OTHER INFORMATION: L6 V kappa signal peptide
; FEATURE:
; NAME/KEY: DOMAIN
; LOCATION: (24)..(133)
; OTHER INFORMATION: G19-4 mouse anti-human CD3 light chain variable domain
; FEATURE:
; NAME/KEY: PEPTIDE
; LOCATION: (134)..(148)
; OTHER INFORMATION: (Gly4Ser)3 linker peptide
; FEATURE:
; NAME/KEY: DOMAIN
; LOCATION: (149)..(270)
; OTHER INFORMATION: G19-4 mouse anti-human VH domain
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (271)..(504)
; OTHER INFORMATION: human IgG1 Fc domain (hinge, CH2, CH3)
; FEATURE:
; NAME/KEY: TRANSMEM
; LOCATION: (505)..(555)
; OTHER INFORMATION: human CD80 transmembrane domain and cytoplasmic tail
US-10-107-991B-3

Query Match 37.4%; Score 1278; DB 12; Length 555;
Best Local Similarity 47.5%; Pred. No. 2e-81;
Matches 302; Conservative 46; Mismatches 126; Indels 162; Gaps 18;

Qy 1 MNRGVPFHLHLVLQALLPAPATQGNKVVLKKGPTVELTCTASQKSIQFHW---KSN 57
Db 19 MSRGVDIQ-----MTQTSSLSASLDRAVITSCRAQDIDRNYLAWYIQQKFDG 65
Qy 58 QIKILNGSGFLTKGPKSLNDRADSRSLWDQ--NPLIIRNLKIEDSDTYICEVEDQKE 116
Db 66 TVKLL-----IYVT---SRLLHSGVPSRFSGSGSGTDYSLTIANLPEDIDATYFCQ----- 112
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Oy 11 EVOLIVFGLTANSDFTHLLOGOSLTLTLBSPSSSVOCSPRGNIQOGKT---LSVSQ 173
Db 113 -----QONTLPMFT--GGCTKLVTRELGGGSGGSGGGSIDE 151
Oy 174 LELODSGTWTCTVLONOKKVEFKIDIVLAFOKASIIYKKEGROVERSPFLATVEKLT 233
Db 152 VOLQOSGP-----ELV--KPGASMSCKASG---YSF-TGYIVN-- 183
Oy 234 GSGELWQOMERASSKSWITFDLKNKEVSVKRVNODPLQOGKULPLHLTLPOLPYAG 293
Db 184 -----WLOKSHGKNLEWIGLINPYGLT--TYNOKFK----- 213
Oy 294 SGNLTLLFAKTKLKHQOEVLVVMRATOLQKNLTCEVWGPTSPKIMLKLKENKAVSK 353
Db 214 -GRATTLVDSKSSATYME-----LTLSTSE----- 237
Oy 354 REKRVWVLNEBAGMOCLLS---DSGOVLLESNIKULPTWSTYPERPSCKTHTCPPC 409
Db 238 -----DSAVYYCARSGYYGSDMYFDVWGAAGTTVTYSSDLPEKSSDKHTSPSP 287
Oy 410 APELLGSPSVFLPPPKPKDTLMSRTPREYTCVVNVDSHEDPEVKFNWVDDEVHANKTK 469
Db 288 APELLGSSSVFLPPPKPKDTLMSRTPREYTCVVNVDSHEDPEVKFNWVDDEVHANKTK 347
Oy 470 PREBOINSYRVVSVLTVLHODWLNGKEYKCVSNKALPAPIEKTISAKAQOPREPOYTT 529
Db 348 PREBOINSYRVVSVLTVLHODWLNGKEYKCVSNKALPAPIEKTISAKAQOPREPOYTT 407
Oy 530 LPPRDELTLNGOVSFLTCVLKGYFPSPDIAYEMESNQPENNKYTPPVLDGSGFFLYSKL 589
Db 408 LPPRDELTLNGOVSFLTCVLKGYFPSPDIAYEMESNQPENNKYTPPVLDGSGFFLYSKL 467
Oy 590 TVDSKRWQOGNVFSCVMHEALHNHYTKSLSLSPG 625
Db 468 TVDSKRWQOGNVFSCVMHEALHNHYTKSLSLSPG 503

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RESULT 85
US-10-232-838-17
; Sequence 17, Application US/10232838
; Publication No. US20030064053A1
; GENERAL INFORMATION:
; APPLICANT: Liu, Shengjiang
; APPLICANT: Martin, Jean-Francois
; APPLICANT: Liu, Dayou
; TITLE OF INVENTION: MULTIVALENT PROTEIN CONJUGATE WITH MULTIPLE LIGAND-BINDING DOMAINS
; TITLE OF INVENTION: RECEPTORS
; FILE REFERENCE: 26050-707
; CURRENT APPLICATION NUMBER: US/10/232,838
; CURRENT FILING DATE: 2002-08-30
; PRIOR APPLICATION NUMBER: US 06/316,718
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 17
; LENGTH: 934
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: MVP-B
US-10-232-838-17

Query Match      37.4%  Score 1278; DB 12; Length 934;
Best Local Similarity 39.0%  Pred. No. 4e-81;
Matches 328; Conservative 68; Mismatches 141; Indels 304; Gaps 31;

33 KADTVELCTASQ--KKSIOFMKNSNQIKILGNOSFLTKGPKSLNDRADSRSLMDQG 90
      |||:|||||:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|
DB 149 RGHTLVNLCTATPTPLNTRVQMTWSY-----PDKNNRAGAVRRRI-DQS 190
      |||:|||||:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|

QY 91 N-----FPLIKLIKLEDSPTYICEVEDQKEVQLLVFGLTANSDTHL-----Q 135
      |||:|||||:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|
DB 191 NSHANIFYSVLITDMQKDKGLYTCRVRSGPS-----FKSVNTSVHIVDKAFITVKH 243,
      |||:|||||:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|

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QY	136	QGSJLTLTSPGSSPSVQCSPREKNIQGG---KTLVSQLELQDSGWTCTVJONOK	131
Db	244	GAGLINSJPLVSDATSLTLC-----LASGRPHPEITIGR-----DFEALNMQHOD	289
QY	192	KVEFKIDIVLAFQASSIVYKKEGEQVEFSFPLAFTVEKLTGS---GELMWA-----	242
Db	290	PLVYQDV---TREAKKVVWIKRE-----KASKINGAYPCBGRVREALRIRT	334
QY	243	---ERASSKSWITFDI---KNKEVSVKRV---TOD-----PKLOMGKLP	279
Db	335	MMKMQQASFFLPATLITMTVDKGDNNVISFKVLIKEDDAVLYKNGSEFHSVPREHVDILE	394
QY	280	LHLTLPOLPYAG-----SGNLTLA-----LEAK-----TGKL	308
Db	395	VH--LPHQPODAGVARSARYIGGNLTSAFTRLIVRCEAOXKMGPECNHLCTACMNNGVC	452
QY	309	HOENVLVVM-----RATOLQ-----	323
Db	453	HEDTGECCICPGOFMORTCEKACELHTFGRTCKERCSSGOGCKSSYVCLDPYGCSCATGW	512
QY	324	KNLTGE-----VMGP-----TSPKLM	339
Db	513	KGLQGENACHPQFYGPDCIKRCSNNGEMCDRFQGCICSPWMOGLQCSEREGJPRMTPKIV	572
QY	340	-LSLKLFE-----NKEAKSKKEKPW-----	359
Db	573	DLPDHIEVNSGKFNDICKASGMPLPTNEBMTLVKPDGTVLHPKDFNHTHFSVALFTIHR	632
QY	360	VLPNPAQMOCCLSD-SCGVLLLESNI---KVLPT-----WS	391
Db	633	ILPPSGVWCVSVNIVAGMVEKPRISVYVLPKPLNAPRVIDTGNHFAVINISSEPYFGD	692
QY	392	TPV-----EPKSCDKTHTCPCAPBELLGSPVYLFPPPKPKDITMISRTPEVTCVVD	444
Db	693	GPIKSKKLVDDESKSCDKTHTCPCAPBELLGSPVYLFPPPKPKDITMISRTPEVTCVVD	752
QY	445	VSHEDPEYKFMNYVNGVEVHNAKTPREBQVNSTRVYVSVLVTLHODMYLNGXEYKCKVSN	504
Db	753	VSHEDPEYKFMNYVNGVEVHNAKTPREBQVNSTRVYVSVLVTLHODMYLNGXEYKCKVSN	812
QY	505	KALPAPIEKTISKAGQPREPOVYTLPRPSDELITKNQVSLTCLVKGFYPSDIAVEMESNG	564
Db	813	KALPAPIEKTISKAGQPREPOVYTLPRPSDELITKNQVSLTCLVKGFYPSDIAVEMESNG	872
QY	565	QPENNYKTTTPVYLDSDGSGFFLYSKLTVDSKRWQOQGVNFSQSVMHREALHNNHYTQKSLSLSP	624
Db	873	QPENNYKTTTPVYLDSDGSGFFLYSKLTVDSKRWQOQGVNFSQSVMHREALHNNHYTQKSLSLSP	932
QY	625	G 625	
Db	933	G 933	

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RESULT 86
US-10-150-475A-6
; Sequence 6, Application US/10150475A
; Publication No. US20030103965A1
; GENERAL INFORMATION:
; APPLICANT: Adolf, G. et al.
; TITLE OF INVENTION: Cytotoxic CD4 Antibody Immunoconjugates
; FILE REFERENCE: 1/1211
; CURRENT APPLICATION NUMBER: US/10/150,475A
; CURRENT FILING DATE: 2002-05-17
; PRIOR APPLICATION NUMBER: US 60/307,451
; PRIOR FILING DATE: 2001-07-24
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: Patentn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 444
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
/

```

OTHER INFORMATION: Description of Artificial Sequence: Humanised
OTHER INFORMATION: Murine Antibody B1W4 Heavy Chain SEQ ID NO: 6
US-10-150-475A-6

Query Match 37.4%; Score 1277.5; DB 14; Length 444;
Best Local Similarity 48.1%; Pred. No. 1.6e-81;
Matches 293; Conservative 35; Mismatches 92; Indels 189; Gaps 17;

```
30 LGKKGDTVELTCTAS--QKSIQFMH-----KNSNQIKILGNQGSFL-----TKGPSKL 76
11 LKPGGSLRLSCAAGFTSSSYDMSWRQAPGKLEWSTISSGGSYTYLDSIGKRFIT 70
77 NDRADSRSLMDQNPFLIITKLIKEDSDTYICEVEDOKEEVQLVFGITANSDFHLLQ 136
71 S-RDNKNSLYIQMN-----SLRADTAIVYCAQ-----GLD-----YWG 105
137 QSLTTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDSDGTWCTVLQNKKEVERK 196
106 RGTLYTVSSASTKGPSPVFPPLAPSSKSTSGG-TAALGCL----- 142
197 IDIVLAFQKASSIYVKKEGEVEFSFPLAFTVEKLTGSGELMQAERASSSKSWITPDL 256
143 -----VKDYFPEPVTVS-----WNSGALTSG----- 163
257 KKEKESVKEVTQDPKLQMGKKLPLHLTPQALPQVAGSGNLTALBAKTKLHQEVNLVY 316
164 -----VH-TFPAVL-QSSGLYSLSSTVTVPSSSLGTQTYI-- 196
317 MRATQLQKNTLCEWGPSTSPKMLSLKLENKEAKVSKREKPVWVLPKAGMMQCLLSDSG 376
197 -----CNV-----NHKP----- 203
377 QVLESNIKVLPTWSTPVEPKSCDKHTHTCPCPAPABELLGSPVFLPFPKPKDTLMISRT 436
204 -----SNTKV-----DKKVEPKSCDKHTHTCPCPAPABELLGSPVFLPFPKPKDTLMISRT 254
437 EYTCVAVDVSHEDPEVKFNMYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHODMLNGK 496
255 EYTCVAVDVSHEDPEVKFNMYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHODMLNGK 314
497 EYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYGPPSDI 556
315 EYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYGPPSDI 374
557 AVEMESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNYT 616
375 AVEMESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNYT 434
617 QKSLSLSPG 625
435 QKSLSLSPG 443
```

RESULT 87
US-10-704-522-6
Sequence 6, Application US/10704522
Publication No. US20040120949A1
GENERAL INFORMATION:
APPLICANT: Adolf, Gunther
APPLICANT: Baumann, Michael
APPLICANT: Heider, Karl-Heinz
TITLE OF INVENTION: Compositions and methods for treating cancer using
FILE REFERENCE: 1/1414
CURRENT APPLICATION NUMBER: US/10/704,522
CURRENT FILING DATE: 2003-11-07
PRIOR APPLICATION NUMBER: US 60/429,516
PRIOR FILING DATE: 2002-11-27
PRIOR APPLICATION NUMBER: EP 02024861
NUMBER OF SEQ ID NOS: 9
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 6

LENGTH: 444
TYPE: PR
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Humanised Murine Antibody B1W4 Heavy Chain
US-10-704-522-6

Query Match 37.4%; Score 1277.5; DB 16; Length 444;
Best Local Similarity 48.1%; Pred. No. 1.6e-81;
Matches 293; Conservative 35; Mismatches 92; Indels 189; Gaps 17;

```
30 LGKKGDTVELTCTAS--QKSIQFMH-----KNSNQIKILGNQGSFL-----TKGPSKL 76
11 LKPGGSLRLSCAAGFTSSSYDMSWRQAPGKLEWSTISSGGSYTYLDSIGKRFIT 70
77 NDRADSRSLMDQNPFLIITKLIKEDSDTYICEVEDOKEEVQLVFGITANSDFHLLQ 136
71 S-RDNKNSLYIQMN-----SLRADTAIVYCAQ-----GLD-----YWG 105
137 QSLTTLTLESPGSSPVQCRSPRGKNIQGGKTLVSQLELDSDGTWCTVLQNKKEVERK 196
106 RGTLYTVSSASTKGPSPVFPPLAPSSKSTSGG-TAALGCL----- 142
197 IDIVLAFQKASSIYVKKEGEVEFSFPLAFTVEKLTGSGELMQAERASSSKSWITPDL 256
143 -----VKDYFPEPVTVS-----WNSGALTSG----- 163
257 KKEKESVKEVTQDPKLQMGKKLPLHLTPQALPQVAGSGNLTALBAKTKLHQEVNLVY 316
164 -----VH-TFPAVL-QSSGLYSLSSTVTVPSSSLGTQTYI-- 196
317 MRATQLQKNTLCEWGPSTSPKMLSLKLENKEAKVSKREKPVWVLPKAGMMQCLLSDSG 376
197 -----CNV-----NHKP----- 203
377 QVLESNIKVLPTWSTPVEPKSCDKHTHTCPCPAPABELLGSPVFLPFPKPKDTLMISRT 436
204 -----SNTKV-----DKKVEPKSCDKHTHTCPCPAPABELLGSPVFLPFPKPKDTLMISRT 254
437 EYTCVAVDVSHEDPEVKFNMYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHODMLNGK 496
255 EYTCVAVDVSHEDPEVKFNMYVDGVEVHNAKTKPREEQYNSTYRVSVLTVLHODMLNGK 314
497 EYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYGPPSDI 556
315 EYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGYGPPSDI 374
557 AVEMESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNYT 616
375 AVEMESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRWQQGNVFCSCVMHEALHNYT 434
617 QKSLSLSPG 625
435 QKSLSLSPG 443
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RESULT 88
US-10-645-215-6
Sequence 6, Application US/10645215
Publication No. US20040126379A1
GENERAL INFORMATION:
APPLICANT: Adolf, Gunther
APPLICANT: Baum, Anke
APPLICANT: Heider, Karl-Heinz
TITLE OF INVENTION: Compositions and methods for treating cancer using
FILE REFERENCE: 1/1383
CURRENT APPLICATION NUMBER: US/10/645,215
CURRENT FILING DATE: 2003-08-21
PRIOR APPLICATION NUMBER: EP 02 018 686.2
PRIOR FILING DATE: August 21, 2002
PRIOR APPLICATION NUMBER: US 60/405,956

```
/ PRIOR FILING DATE: August 26, 2002
/ NUMBER OF SEQ ID NOS: 9
/ SOFTWARE: Patent In Ver. 2.1
/ SEQ ID NO 6
/ LENGTH: 444
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Humanised Murine Antibody Biwa 4 Heavy Chain
US-10-645-215-6

Query Match      37.4%; Score 1277.5; DB 16; Length 444;
Best Local Similarity 48.1%; Pred. No. 1.6e-81;
Matches 293; Conservative 35; Mismatches 92; Indels 189; Gaps 17;

QY 30 LGKKDYTELTCTAS--QKKSIOFHM-----KNSNQKIIGNQSF-----TKGPRKL 76
DB 11 LVKPGSURLSCAAGFTPSSYDMSWVRQAPGKLEWVSTTSSGSGTYLIDSIKGRFTI 70
QY 77 NDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDOKEVEQLVFGILTANSDTHLQ 136
DB 71 S-RDAKNSLYIQN-----SLRADTAIVYCAQ-----GLD-----YWG 105
QY 137 QSLTILTSPSSSVQCRSPRGNIOGKTLVSQLELQDSGTWTCTVLQNKVEFK 196
DB 106 RGLTVTSASATKGSVFPLAPSSKSTSG--TAAIGCL----- 142
QY 197 IDIVLALQKASIIYKKKEGVEFSFPLAFVETLTGSGELMWAERASSKSWITFDL 256
DB 143 -----VKDYFPBPVTVS-----NMSGALTSG----- 163
QY 257 KKEVSVKRVITQDPKLQMGKLLPLHLTLPOALPOYAGSGNLTALAEATGKLHOEVLV 316
DB 164 -----VH-TTPAVL-QSSGLYSLSVTVTPSSSLGTQTYI-- 196
QY 317 MEATOLQKLTCEVWGPTSPKLMLSKLENKEAKVSKREKPVVLNPEAGMQLLSDG 376
DB 197 -----CNV-----NHKP----- 203
QY 377 QVLESNIKVLPTWSTPVEPKSCDKTHTCPCPAPELLGGPSVFLFPPKPDMLISRT 436
DB 204 -----SNKTV-----DKVEPKSCDKTHTCPCPAPELLGGPSVFLFPPKPDMLISRT 254
QY 437 EYTCVVVVDVSHEDPEVKFMWYDGYEVNNAKTKPREEOYNSTYRVVSVLTVLHQDWLNGK 496
DB 255 EYTCVVVVDVSHEDPEVKFMWYDGYEVNNAKTKPREEOYNSTYRVVSVLTVLHQDWLNGK 314
QY 497 EYKCVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGYFPE 556
DB 315 EYKCVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGYFPE 374
QY 557 AVEMESNQPENNYKTTTPVLDSGFFLYSKLTVDKSRMOQGNVFSGVMEALAHNYT 616
DB 375 AVEMESNQPENNYKTTTPVLDSGFFLYSKLTVDKSRMOQGNVFSGVMEALAHNYT 434
QY 617 QKSLSLSPG 625
DB 435 QKSLSLSPG 443

RESULT 89
US-09-773-877A-16
/ Sequence 16, Application US/09773877A
/ Publication No. US20030017977A1
/ GENERAL INFORMATION:
/ APPLICANT: Xia, Yu-ping et al.
/ TITLE OF INVENTION: METHODS FOR TREATING INFLAMMATORY SKIN DISEASES
/ FILE REFERENCE: REG 710b
/ CURRENT APPLICATION NUMBER: US/09/773,877A
/ PRIOR FILING DATE: 2001-01-31
/ NUMBER OF SEQ ID NOS: 27
/ SOFTWARE: Patent In version 3.0
/ SEQ ID NO 16
```

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/ LENGTH: 452
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Flt1(2-3 delta)-Fc
US-09-773-877A-16

Query Match      37.4%; Score 1277; DB 12; Length 452;
Best Local Similarity 55.5%; Pred. No. 1.8e-81;
Matches 276; Conservative 36; Mismatches 85; Indels 100; Gaps 16;

QY 178 DSGTWTCTVLO-----NQKVEFKIDIVLALQKASIIYKKKEGVEFSFPLAF 227
DB 6 DTGVLALSLCLLITGSSSGCRPFVEM-----YSEIPEIIMTEGR--ELVIPC 55
QY 228 TVEKLT-----GSGELMWAERASSKSWITFDLKNKVEVSVKRVITQDPKLQ 273
DB 56 TSPNITVTLKKFPLIDLPDGRKRIY-----DSRKGFISMATYKELG----- 99
QY 274 MGKLLPLHLTLPOALPOYAGSGNLTALAEATGKL-HOEVLV-----MRATOLQ 325
DB 100 -----LTCEATV-----NGHL-----YKTVLTHRQNTIIDVQISTPRVKLLRGH 141
QY 326 ---LTCEWGPSTPKMLMS-----LKENKEK-----VSKREKPVVLNPEAGM 369
DB 142 TLVNLCTATTPLNTRVQMTWSYPDEIDQNSHANI FYSVLITDKQ-----NKDKGLYT 195
QY 370 CLTSDSQVLESNIKY-LPTWSTPVEPKSCDKTHTCPCPAPELLGGPSVFLFPPKPD 428
DB 196 CRV--SGPSFKSVNTSHIYDKAGGEPKSCDKTHTCPCPAPELLGGPSVFLFPPKPD 254
QY 429 TLMISRTPEVTCVVVDVSHEDPEVKFMWYDGYEVNNAKTKPREEOYNSTYRVVSVLTVL 488
DB 255 TLMISRTPEVTCVVVDVSHEDPEVKFMWYDGYEVNNAKTKPREEOYNSTYRVVSVLTVL 314
QY 489 HQDWLNGEYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLV 548
DB 315 HQDWLNGEYKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLV 374
QY 549 KGFPSPDIAVEMESNQPENNYKTTTPVLDSGFFLYSKLTVDKSRMOQGNVFSGVME 608
DB 375 KGFPSPDIAVEMESNQPENNYKTTTPVLDSGFFLYSKLTVDKSRMOQGNVFSGVME 434
QY 609 EALHNHYTQKSLSLSPG 625
DB 435 EALHNHYTQKSLSLSPG 451

RESULT 90
US-10-357-653-2
/ Sequence 2, Application US/10357653
/ Publication No. US20030162712A1
/ GENERAL INFORMATION:
/ APPLICANT: Cerrecti, Douglas P.
/ APPLICANT: Borges, Luis G.
/ APPLICANT: Fanslow, III, William C.
/ TITLE OF INVENTION: TEK ANTAGONISTS
/ FILE REFERENCE: 2900-A
/ CURRENT APPLICATION NUMBER: US/10/357,653
/ PRIOR FILING DATE: 2003-02-03
/ PRIOR APPLICATION NUMBER: US/09/733,764
/ PRIOR FILING DATE: 2000-12-07
/ PRIOR FILING DATE: 1999-06-07
/ NUMBER OF SEQ ID NOS: 2
/ SOFTWARE: Patent In Ver. 2.0
/ SEQ ID NO 2
/ LENGTH: 704
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-10-357-653-2

Query Match      37.4%; Score 1277; DB 14; Length 704;
```


Best Local Similarity 84.1%; Pred. No. 3.2e-81;
Matches 244; Conservative 9; Mismatches 13; Indels 24; Gaps 4;

QY 360 VLNPEAGMOCCLSD--SGOVLESNI--KYL-----TWSTV--E 395
DB 414 ILPPDSGVWCVSYNTAGVWEKPFNISKVLPKPLNAPNVIDTGNPAVINISSEYFGE 473
QY 396 PKSCDTHTCPPCAPBELLGGPSVFLPPPKDITLMSRTPEVTCVVVSHEDPEVKFN 455
DB 474 PKSCDTHTCPPCAPBELLGGPSVFLPPPKDITLMSRTPEVTCVVVSHEDPEVKFN 533
QY 456 WYVDGVEVHNAKTPREEOYNSTRVSVLTVLHODMLNGKEYCKVSNKALPAPIEKT 515
DB 534 WYVDGVEVHNAKTPREEOYNSTRVSVLTVLHODMLNGKEYCKVSNKALPAPIEKT 593
QY 516 SKAKGPREPOVYTLPPSRDELTKQVSLTCLVKGFPSPDIWEMESNGOPENNYKTPP 575
DB 594 SKAKGPREPOVYTLPPSRDELTKQVSLTCLVKGFPSPDIWEMESNGOPENNYKTPP 653
QY 576 VLSDSGSFFLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTKSLSPG 625
DB 654 VLSDSGSFFLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTKSLSPG 703

RESULT 91
US-10-660-128-12
/ Sequence 12, Application US/10660128
/ Publication No. US20040120947A1
/ GENERAL INFORMATION:
/ APPLICANT: Ashkenazi, Avi
/ APPLICANT: Chundharapal, Anan
/ APPLICANT: Dodge, Kelly
/ APPLICANT: Kim, Kyung Jin
/ TITLE OF INVENTION: DR4 Antibodies and Uses Thereof
/ FILE REFERENCE: P1245R1P2B
/ CURRENT APPLICATION NUMBER: US/10/660,128
/ PRIOR FILING DATE: 2003-09-11
/ PRIOR APPLICATION NUMBER: US/09/584,166
/ PRIOR FILING DATE: 2000-05-25
/ PRIOR APPLICATION NUMBER: US 09/322,875
/ PRIOR FILING DATE: 1999-05-28
/ PRIOR APPLICATION NUMBER: US 09/237,299
/ PRIOR FILING DATE: 1999-01-25
/ PRIOR APPLICATION NUMBER: US 60/072,481
/ PRIOR FILING DATE: 1998-01-26
/ NUMBER OF SEQ ID NOS: 12
/ SEQ ID NO 12
/ LENGTH: 476
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Sequence is synthesized.
/ NAME/KEY: M1sc_feature
/ LOCATION: 20
/ OTHER INFORMATION: Xaa may be glutamine or glutamic acid
US-10-660-128-12

Query Match 37.4%; Score 1276; DB 16; Length 476;
Best Local Similarity 48.7%; Pred. No. 2.2e-81;
Matches 291; Conservative 37; Mismatches 105; Indels 164; Gaps 16;

QY 36 TWELTGTAS--QKKSIOFHWNKSNQKIILGNOGSLFKPKSKLNPAADRSI--WDQGNF 92
DB 36 SLSTICTVSGFSLTSGVHWVROPPOPKGLEMGLVIAVASTYNSALMSRLSISKDNSKS 95
QY 93 PLTIK--NLKIEDSDTYICEVEDOKSEVOLVGLTANSDTHLQ--GSLTTLTLESPPG 148
DB 96 QVFLKNSLQTDITAMTYCAREGEFD----YGGSSLLS-YHSMNFGGCTSVTVSSACT 149
QY 149 SSPSVOCRRPCKNIGOGKTLVSQLELQDSGTWCTCTVLQONKQVFKIDIVLAFQKAS 208
DB 150 TGPSVFPPLAPSSKSTSGG--TAALGCL----- 174

QY 209 SLVYKKEGEVFEFPLAFVTEKLTGSGELMWQAERASSKSWITFDLKNKEVSVKRTQ 268
DB 175 -----VADYFPEVTVS-----INSGALTSG----- 195
QY 269 DPKLQMGKPLPLHLTLPOLPOYAGSGNLTLALBAKTGKHQEVNLVVMRATQLOKNTLC 328
DB 156 -----VH-TFPAVL-QSSGLYSLSSVTVTPSSSLGTQYI-----C 229
QY 329 EYWGCTPRLMLSLKLENKEAKVSKREKPVWVLPNPEAGMOCCLSDSGOVLESNIKLP 388
DB 230 NV-----NHRP-----SNTKY-- 240
QY 389 TWSTVPEKSCDKHTCCPCAPBELLGGPSVFLPPPKDITLMSRTPEVTCVVVDVSH 448
DB 241 --DKVPEKSCDKHTCCPCAPBELLGGPSVFLPPPKDITLMSRTPEVTCVVVDVSH 298
QY 449 DEVEKFNWYVDGVEVHNAKTPREEOYNSTRVSVLTVLHODMLNGKEYCKVSNKALP 508
DB 229 DEVEKFNWYVDGVEVHNAKTPREEOYNSTRVSVLTVLHODMLNGKEYCKVSNKALP 358
QY 509 APIEKTISKAKGPREPOVYTLPPSRDELTKQVSLTCLVKGFPSPDIWEMESNGOPEN 568
DB 359 APIEKTISKAKGPREPOVYTLPPSRDELTKQVSLTCLVKGFPSPDIWEMESNGOPEN 418

QY 569 NYKTPPLVLDSDGSFFLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTKSLSPG 625
DB 419 NYKTPPLVLDSDGSFFLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTKSLSPG 475

RESULT 92
US-10-050-227-4
/ Sequence 4, Application US/10050227
/ Publication No. US2003006481A1
/ GENERAL INFORMATION:
/ APPLICANT: Browne, Michael J.
/ Murphy, Kay E.
/ Chapman, Conrad G.
/ Clinkenbeard, Helen E.
/ Young, Peter R.
/ Shatzman, Allan R.
/ TITLE OF INVENTION: Novel Compounds
/ NUMBER OF SEQUENCES: 21
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: SmithKline Beecham Corporation
/ STREET: 709 Swedeland Road, P.O. Box 1539
/ CITY: King of Prussia
/ STATE: Pennsylvania
/ COUNTRY: USA
/ ZIP: 19406
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/10/050,227
/ FILING DATE: 16-Jan-2002
/ CLASSIFICATION: <Unknown>
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US/09/200,324
/ FILING DATE: <Unknown>
/ APPLICATION NUMBER: US 08/468,296
/ FILING DATE: 06-JUN-1995
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Sutton, Jeffrey A.
/ REGISTRATION NUMBER: 34,028
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 610-270-5024
/ TELEFAX: 610-270-5090
/ INFORMATION FOR SEQ ID NO: 4:
/ SEQUENCE CHARACTERISTICS:

LENGTH: 387 amino acids
TYPE: amino acid
STRANDEDNESS: <Unknown>
TOPOLOGY: linear
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-10-050-227-4

Query Match 37.4%; Score 1275.5; DB 12; Length 387;
Best Local Similarity 85.2%; Pred. No. 1.8e-81;
Matches 241; Conservative 13; Mismatches 18; Indels 11; Gaps 2;

QY 351 VSKREKPVAVLNPEAGMOCCLSDSGQVLESNIKVLPT-----MSTPVEPKSCXT 402
DB 107 LKRLRLNLMGL---AGLNSCPVKEANOSTLENFLEKRLKTIKMEKSKSSSGTEPEKADKT 163
QY 403 HTCPCPAPBELLGGSVFLFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKMNVVDGVE 462
DB 164 HTCPCPAPBELLGGSVFLFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKMNVVDGVE 223
QY 463 VNAATKPREEOYNSTYRVSVLTVLHODMLNGKEYCKVSNKALPAPIETKISKAKGP 522
DB 224 VNAATKPREEOYNSTYRVSVLTVLHODMLNGKEYCKVSNKALPAPIETKISKAKGP 283
QY 523 REPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGS 582
DB 284 REPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGS 343
QY 583 PFLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTQKSLSLSPG 625
DB 344 PFLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTQKSLSLSPG 386

RESULT 93
US-10-159-006-18

Sequence 18, Application US/10159006
Publication No. US20030143229A1
GENERAL INFORMATION:
APPLICANT: Park, John E.
APPLICANT: Garin-Cheea, Pilar
APPLICANT: Bamberger, Uwe
APPLICANT: Legger, Olivier
APPLICANT: Saldana, Jose W.
APPLICANT: Rettig, Wolfgang J.
TITLE OF INVENTION: Fapa-specific Antibody with Improved Productibility
FILE REFERENCE: 0652.1890002
CURRENT APPLICATION NUMBER: US/10/159,006
CURRENT FILING DATE: 2002-06-03
PRIOR APPLICATION NUMBER: US 09/301,593
PRIOR FILING DATE: 1999-04-29
PRIOR APPLICATION NUMBER: EP 98107925.4
PRIOR FILING DATE: 1998-04-30
PRIOR APPLICATION NUMBER: US 60/086,049
PRIOR FILING DATE: 1998-05-18
NUMBER OF SEQ ID NOS: 108
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 18
LENGTH: 453
TYPE: PRT
ORGANISM: Homo sapiens
US-10-159-006-18

Query Match 37.4%; Score 1275.5; DB 14; Length 453;
Best Local Similarity 47.8%; Pred. No. 2.3e-81;
Matches 289; Conservative 39; Mismatches 107; Indels 169; Gaps 16;

QY 30 LGGKDDYVELTCTASQKSIQF--HWKNSNOIKIIGNOSF-LYKGPGLKNDRADRSRL 86
DB 10 LVKPGASVMSCKSTRYFTETIHWVQSHGSKSLWIGGINPNNGINPNYQKFKGRATL 69
QY 87 W---DQGNFPLIKRLKIEDSTYICVEVDCKEYQGLVFLGTANSDPHLQ--GQSITL 141
DB 70 TVGKSSSTAYALWRLTSEDSAVYFC-----ARRIAYGY--DEGHADYWGQGTSTV 119

QY 142 TLSPSSSPSSVQCRSPGRKNIQGGKTLVSQLELDQSGTWCTVLQNKVKEFKIDIV 201
DB 120 TVSSASTKSPSVFLPABSSKSTSGG-TAALGCL----- 151

QY 202 LAFQKASSIVYKKEGEQVPSFPLATFVEKLTGSGELMQAERASSSKSMTTFLKNEV 261
DB 152 -----VKDYFPEPVTVS-----MNSGALTSG----- 172

QY 262 SVKAVTDQPKLQMGKKLPLHLTLPOALPOYAGSNTLTALAEAKTGKHOEYNLVMBATQ 321
DB 173 -----VH-TTPAVL-QSSGLYSLSVYTVPSSSIGTQYI----- 205

QY 322 LQKNLTCEWGPSPKMLSLKLENKAKVSKREKPVAVLNPEAGMOCCLSDSGQVLE 381
DB 206 -----CNV-----NHKP----- 212

QY 382 SNIVLPTWSTPVEPKSCDTHTCPCPAPBELLGGSVFLFPKPKDTLMISRTPEVTCV 441
DB 213 SNTKV---DKVPEPKSCDTHTCPCPAPBELLGGSVFLFPKPKDTLMISRTPEVTCV 268

QY 442 VVDVSHEDPEVKFMYVDGYEVHNAKTPREEOYNSTYRVSVLTVLHODMLNGKEYCK 501
DB 269 VVDVSHEDPEVKFMYVDGYEVHNAKTPREEOYNSTYRVSVLTVLHODMLNGKEYCK 328

QY 502 VSNKALPAPIETKISKAKGPREPQVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEM 561
DB 329 VSNKALPAPIETKISKAKGPREPQVYTLPPSRDEMTKNQVSLTCLVKGFYPSDIAVEM 388

QY 562 SNGPENNYKTTTPVLDSDGSFLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTQKSLS 621
DB 389 SNGPENNYKTTTPVLDSDGSFLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTQKSLS 448

QY 622 LSPG 625
DB 449 LSPG 452

RESULT 94
US-09-740-002-25

Sequence 25, Application US/09740002
Patent No. US20020001798A1
GENERAL INFORMATION:
APPLICANT: BRAMS, PETER
APPLICANT: MORROW, PHILIP
TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES
TITLE OF INVENTION: SPECIFIC TO RSV F-PROTEIN AND METHODS FOR THEIR
TITLE OF INVENTION: MANUFACTURE AND THERAPEUTIC USE THEREOF
FILE REFERENCE: 037003-0275759
CURRENT APPLICATION NUMBER: US/09/740,002
CURRENT FILING DATE: 2000-12-30
PRIOR APPLICATION NUMBER: 09/335,697
PRIOR FILING DATE: 1999-06-18
PRIOR APPLICATION NUMBER: 08/488,376
PRIOR FILING DATE: 1995-06-07
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 25
LENGTH: 475
TYPE: PRT
ORGANISM: Homo sapiens
US-09-740-002-25

Query Match 37.4%; Score 1275.5; DB 9; Length 475;
Best Local Similarity 46.8%; Pred. No. 2.4e-81;
Matches 298; Conservative 35; Mismatches 111; Indels 193; Gaps 16;

QY 10 LLVLQALPLPATQGNKVVYLGKKGDTVELTCTAS-----QKSKIQFHWK 54
DB 10 LVAATRVLSQVQOESGPVVVVKPTELTTLCTVSGSLSNPRMGVWIRPQKALEW- 68
QY 55 NSNOIKILGN-----QGSFLTKGPGSKLNDRADRSRLMDQGNFLLIKLKIEDSDTYIC 109
DB 69 -----LGNIFSDSEKSFSPSLKSLRLTTSODTSRS-----QVVLSTLNVDPVDTATYYC 116

QY 110 EVEDQKEEVOLLVFGLTANS DTHL-LOGOSLTLTLESPPSSPVOCSPRGKNIQGGKT 168
117 -----ARVGLYDINAYLYLYLDYWGCGTLVTVSASTKGPSVFLPAPSSKSTSGG-T 167
QY 169 LSVSOLELQDSDGTWCTCTVLQNKQKVEFKIDIVVLAFOKASSIVYKKEGQVEFPFLAFT 228
168 AALGCL-----VKDYFPPEPVT 183
QY 229 VEKLTSGELMWQAERASSKSMITFDLKNKEVSVKRVYQDPKLOMGKLLPLHLTLPQAL 288
184 VS-----NMSGALTSG-----VH-TFPAVL 202
QY 289 POYAGSGNLTLLAEAKTGKLGHOEVLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKE 348
203 -QSSGLYSLSVTVTPSSSLGTQTYI-----CNV----- 230
QY 349 AKVSKREKRPVWVLNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEPKSCDKHTTCCPC 408
231 -----NHKP-----SNTKV-----DKKAEPKSCDKHTTCCPC 257
QY 409 PAPELLGGPSVFLFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKENMYVDGVEVHNAKT 468
258 PAPELLGGPSVFLFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKENMYVDGVEVHNAKT 317
Db 469 KPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPOY 528
318 KPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPOY 377
QY 529 TLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTPVLDSDGSFFLYSK 588
378 TLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTPVLDSDGSFFLYSK 437
QY 589 LTVDSKRMQOGNVFSCSVHHEALHNHYTQKSLSLSPG 625
438 LTVDSKRMQOGNVFSCSVHHEALHNHYTQKSLSLSPG 474
Db
RESULT 95
US-10-325-698-25
; Sequence 25, Application US/10325698
; Publication No. US20040076631A1
; GENERAL INFORMATION:
; APPLICANT: BRAMS, PETER
; APPLICANT: MORROW, PHILLIP
; TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES
; TITLE OF INVENTION: SPECIFIC TO RSV F-PROTEIN AND METHODS FOR THEIR
; FILE REFERENCE: 037003-0275759
; CURRENT APPLICATION NUMBER: US/10/325,698
; PRIOR FILING DATE: 2002-12-19
; PRIOR APPLICATION NUMBER: US/09/740,002
; PRIOR FILING DATE: 2000-12-20
; PRIOR APPLICATION NUMBER: 09/335,697
; PRIOR FILING DATE: 1999-06-18
; PRIOR APPLICATION NUMBER: 08/488,376
; PRIOR FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 25
; LENGTH: 475
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-325-698-25
Query Match 37.4%; Score 1275.5; DB 16; Length 475;
Best Local Similarity 46.8%; Pred. No. 2,4e-81;
Matches 298; Conservative 35; Mismatches 111; Indels 193; Gaps 16;
QY 10 LLLVLLALPLPAATGQNKVYLGGKQDTVELTCTAS-----QKKSIOFHWK 54
10 LVAAVATRVLSQVQLQESGPVYVVPETELTITCTVSGFSLNPRMGVTWIRQPGKALEW- 68
Db

QY 55 NSNQIKILGN-----QGSFLLTGKPSKLNDRADRSRLWDQGNFPLIINKLIKIEDSDTYIC 109
69 -----LGNITSSDEKSFSPSLKSLRLTTSQDTSRS-----QVLSLTINVDPEVDATYYC 116
Db 110 EVEDQKEEVOLLVFGLTANS DTHL-LOGOSLTLTLESPPSSPVOCSPRGKNIQGGKT 168
117 -----ARVGLYDINAYLYLYLDYWGCGTLVTVSASTKGPSVFLPAPSSKSTSGG-T 167
QY 169 LSVSOLELQDSDGTWCTCTVLQNKQKVEFKIDIVVLAFOKASSIVYKKEGQVEFPFLAFT 228
168 AALGCL-----VKDYFPPEPVT 183
QY 229 VEKLTSGELMWQAERASSKSMITFDLKNKEVSVKRVYQDPKLOMGKLLPLHLTLPQAL 288
184 VS-----NMSGALTSG-----VH-TFPAVL 202
QY 289 POYAGSGNLTLLAEAKTGKLGHOEVLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKE 348
203 -QSSGLYSLSVTVTPSSSLGTQTYI-----CNV----- 230
QY 349 AKVSKREKRPVWVLNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEPKSCDKHTTCCPC 408
231 -----NHKP-----SNTKV-----DKKAEPKSCDKHTTCCPC 257
QY 409 PAPELLGGPSVFLFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKENMYVDGVEVHNAKT 468
258 PAPELLGGPSVFLFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKENMYVDGVEVHNAKT 317
Db 469 KPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPOY 528
318 KPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPOY 377
QY 529 TLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTPVLDSDGSFFLYSK 588
378 TLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTPVLDSDGSFFLYSK 437
QY 589 LTVDSKRMQOGNVFSCSVHHEALHNHYTQKSLSLSPG 625
438 LTVDSKRMQOGNVFSCSVHHEALHNHYTQKSLSLSPG 474
Db
RESULT 96
US-10-108-260A-4285
; Sequence 4285, Application US/10108260A
; Publication No. US20040005560A1
; GENERAL INFORMATION:
; APPLICANT: HELIX RESEARCH INSTITUTE
; TITLE OF INVENTION: No. US20040005560A1e1 full length cDNA
; FILE REFERENCE: H1-A0106
; CURRENT APPLICATION NUMBER: US/10/108,260A
; PRIOR FILING DATE: 2002-03-27
; NUMBER OF SEQ ID NOS: 5458
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4285
; LENGTH: 471
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-108-260A-4285
Query Match 37.3%; Score 1275; DB 15; Length 471;
Best Local Similarity 53.1%; Pred. No. 2,6e-81;
Matches 286; Conservative 18; Mismatches 77; Indels 158; Gaps 13;
QY 163 IGGKTLVSQLELQDSDGTWCTCTVLQNKQKVEFKIDIVVLAFOKASSIVYKKEGQVEFP 222
14 ISGQ-----SQVPLVQSGT-----EVKKPGASVNIIS 40
QY 223 PP-----LAFT-----VEKLTSGELMWQAERASSKSMITFDLKNKEVSVKRVYQDPKLO 273
41 CKAPGYTFTTYMHVNRAPQGLGEMWGIKRNPSGRS-----SVSQK----- 82
QY 274 MGKLLPLHLTLPQALPOYAGSGNLTLLAEAKTGKLGHOEVLVVMRATQLOKNLTCE----- 329

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Db      83 -----FEGRLTLTADTSTTTAMHLE-----ENLTSDDTGV 112
Qy      330 -----VWGFTSPKMLSLKLENKE-----AKVSKR----- 354
Db      113 YCTTTTRMKMYVRGNDNMGQSLVIVSSASTKGSVFPPLAPSSSTGCTAALGCLVKD 172
Qy      355 --EKPVWV-----LNPAAGMOCCLSDSGOVLLESNIKVLPWMS----- 391
Db      173 YEPREVTSNMNSGALITSGVHTFPVAVLQSSGLYSL--SVTVVTPSSSLGTQYICNVNHNKS 231
Qy      352 -----TPVEPKSCDKTHTCPPCPAPPELLGSGSVLPFPKPKDTLMIISTPEVTCVVDVS 446
Db      232 NTKYDEKVEPKSCDKTHTCPPCPAPPELLGSGSVLPFPKPKDTLMIISTPEVTCVVDVS 291
Qy      447 HEDPEVKFNMYVDGVEVHNAAKTPREBOYNSTRYVSVLTVLHODMLNGEKYCKVSKA 506
Db      292 HEDPEVKFNMYVDGVEVHNAAKTPREBOYNSTRYVSVLTVLHODMLNGEKYCKVSKA 351
Qy      507 LPAPLEKTIKRAKQGPREFQVYTLPPSRDELTKQVSLTCLVKGFPSPDIAVEMESNGQP 566
Db      352 LPAPLEKTIKRAKQGPREFQVYTLPPSRDELTKQVSLTCLVKGFPSPDIAVEMESNGQP 411
Qy      567 ENNYKTTTPVLDSDGSFPLYSKLTVDKSRMOQGNVFCSSVMHEALHNYTQKSLSLSPG 625
Db      412 ENNYKTTTPVLDSDGSFPLYSKLTVDKSRMOQGNVFCSSVMHEALHNYTQKSLSLSPG 470

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RESULT 97

```

US-10-404-724-25
; Sequence 25, Application US/10404724
; Publication No. US20030203447A1
; GENERAL INFORMATION:
; APPLICANT: Horwitz, Arnold H.
; TITLE OF INVENTION: Methods and Materials For Increasing Expression of Recombinant
; FILE REFERENCE: 13698US01
; CURRENT APPLICATION NUMBER: US/10/404,724
; PRIOR FILING DATE: 2003-03-31
; PRIOR APPLICATION NUMBER: US 60/368,530
; PRIOR FILING DATE: 2002-03-29
; NUMBER OF SEQ ID NOS: 79
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 25
; LENGTH: 465
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-404-724-25

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Query Match      37.3%; Score 1274.5; DB 12; Length 465;
Best Local Similarity 55.1%; Pred. No. 2.8e-81;
Matches 279; Conservative 29; Mismatches 92; Indels 106; Gaps 14;

Qy      182 WTCTVL---QNKKEFKIDIVLAFQKASSIVYKKEGEVFEFPPLA---FT-----V 229
Db      3 WVTSTLLFLMAAQSAQAQIOLV-----QSGAEVKKPGEISYKSCASGYFTKXGMNV 56
Qy      230 EKLTTSGELMWAQAEASSSSKSWITFDLKNKEYSVKTVDPLQWKKLPLHLPLLPQALP 289
Db      57 ROAPQGLEW-----MGHI-----NTYIEBP--TYGQRF----- 83
Qy      290 QYAGSGNLTALAEATYKGLHDEVLNVNRAQTL---QKNLTCEVWGPSPKMLSLKLE 345
Db      84 ----QGRFTFLDTSTAYLEISLSRSDPTAVYFCARFSGAVDYWGQTLVTVSSASTK 139
Qy      346 NKE---AKVSKR-----EKPVWV-----LNPAAGMOCCLSDSGOVL 379
Db      140 GPSVFPPLAPSSKSTGTAALGCLVKDYFPREVTSNMNSGALTSGVHTFPVLTSSSGYS 199
Qy      380 LESNIKVLPWMS-----TPVEPKSCDKTHTCPPCPAPPELLGSGSV 419
Db      200 L--SVTVVTPSSSLGTQYICNVNHNKPSNTKYDKRVEPKSCDKTHTCPPCPAPPELLGSGSV 258
Qy      420 FLFPKPKDTLMIISTPEVTCVVDVSHEDPEVKFNMYVDGVEVHNAAKTPREBOYNSTY 479

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Db      259 FLFPKPKDTLMIISTPEVTCVVDVSHEDPEVKFNMYVDGVEVHNAAKTPREBOYNSTY 318
Qy      480 RVYSVLTVLHODMLNGEKYCKVSKNKAALPAPIEKTISKAGQPREPOVYTLPPSRDELTK 539
Db      319 RVYSVLTVLHODMLNGEKYCKVSKNKAALPAPIEKTISKAGQPREPOVYTLPPSRDELTK 378
Qy      540 NOVSLTCLVKGFPSPDIAVEMESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRMOQ 599
Db      379 NOVSLTCLVKGFPSPDIAVEMESNGQPENNYKTTTPVLDSDGSFPLYSKLTVDKSRMOQ 438
Qy      600 NVFSCSVMEHALHNYTQKSLSLSPG 625
Db      439 NVFSCSVMEHALHNYTQKSLSLSPG 464

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RESULT 98

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US-10-452-646-9
; Sequence 9, Application US/10452646
; Publication No. US20040018593A1
; GENERAL INFORMATION:
; APPLICANT: Carton, Jill M.
; APPLICANT: Seaguet, Kimberly C.
; APPLICANT: Scallion, Bernard J.
; APPLICANT: Jili, Giles-Komar
; TITLE OF INVENTION: ANTI-REL FUSION ANTIBODIES, COMPOSITIONS, METHODS AND USES
; FILE REFERENCE: CEN0296 NP
; CURRENT APPLICATION NUMBER: US/10/452,646
; CURRENT FILING DATE: 2003-06-02
; PRIOR APPLICATION NUMBER: US 60/385,305
; PRIOR FILING DATE: 2002-06-03
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 9
; LENGTH: 367
; TYPE: PRT
; ORGANISM: homo sapiens
US-10-452-646-9

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Best Local Similarity 75.8%; Pred. No. 2.2e-81;
Matches 254; Conservative 17; Mismatches 28; Indels 36; Gaps 8;

Qy      326 LTCEVWGPTSP-KLMISLKLLENKAAV---SKREKPVWV--LNDE-AGMOCCL----- 371
Db      33 LEOGYSNGAHLSISLSKASTIAEYISGYQNSQPIWIGHDPQKQOQWIDGAMVLY 92
Qy      372 LSDSGOVL-----LESNIKVLPWST-----PVPEKSCDKTHTCPPCPA 410
Db      93 RSWGKMGKGNKHCHEWSSNNFL--TWSNNECNKRQHFLKYRPEPKSCDKTHTCPPCPA 151
Qy      411 PELIGGSPVLPFPKPKDTLMIISTPEVTCVVDVSHEDPEVKFNMYVDGVEVHNAAKTP 470
Db      152 PELIGGSPVLPFPKPKDTLMIISTPEVTCVVDVSHEDPEVKFNMYVDGVEVHNAAKTP 211
Qy      471 REBOYNSTRYVSVLTVLHODMLNGEKYCKVSKNKAALPAPIEKTISKAGQPREPOVYTL 530
Db      212 REBOYNSTRYVSVLTVLHODMLNGEKYCKVSKNKAALPAPIEKTISKAGQPREPOVYTL 271
Qy      531 PPSRDELTKQVSLTCLVKGFPSPDIAVEMESNGQPENNYKTTTPVLDSDGSFPLYSKLT 590
Db      272 PPSRDELTKQVSLTCLVKGFPSPDIAVEMESNGQPENNYKTTTPVLDSDGSFPLYSKLT 331
Qy      591 VDKSRMOQGNVFCSSVMHEALHNYTQKSLSLSPG 625
Db      332 VDKSRMOQGNVFCSSVMHEALHNYTQKSLSLSPG 366

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RESULT 99

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US-10-656-769-20
; Sequence 20, Application US/10656769
; Publication No. US20040097712A1
; GENERAL INFORMATION:

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; APPLICANT: Varnum, Brian
; APPLICANT: Wite, Allison
; APPLICANT: Vezina, Chris
; APPLICANT: Wong, Lu Min
; APPLICANT: Qian, Xueming
; TITLE OF INVENTION: Therapeutic Human Anti-IL-1R Monoclonal Antibody
; FILE REFERENCE: 01,1554
; CURRENT APPLICATION NUMBER: US/10/656,769
; CURRENT FILING DATE: 2003-09-05
; NUMBER OF SEQ ID NOS: 79
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 20
; LENGTH: 469
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-656-769-20

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DB 27 GGGV--QGRSLRLSCAASGFTFSNYGMHWQAPGKLEWVAGIMNDGINKYHAHAYR 84
   |||  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|
QY 78 -----DRADSRRELMDQGNPLIKNLKIEDSDTYICEVEDOKEEYQLLVFGILTANSQTH 132
   |||  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|
DB 85 GRRTIRDSKNTLYIQMNSP-----RAEDTAVYCA--RRKSPDMLTF----- 127
   |||  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|
QY 133 LLOGSLTLTLESPPSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWCTVLQNOQK 192
   |||  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|
DB 128 -FWGGTLTVTSASATKSPSVFPLAPSSKSTSGG-TAALGCL----- 167
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QY 193 VEFKIDIVLAFQKASSIYKKEGEOVERFPLATFVEKLTGSGELIMQAEARASSKSWI 252
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DB 168 -----VKDYFPEPVTVS-----MNSGALTSG----- 188
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QY 253 TFDLKNKEVYKRVTDPRKLQMGKLLPLHLTLPOALPOYAGSGNTLTLAEATGKXHQEV 312
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DB 189 -----VH-TTPAVL-QSSGLYSLSVTVPSSSLGTQT 219
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QY 313 NLVVMKATQLQKNTLTCENVGPTSPKMLSLKLENKEAKVSKREKPYVVLNPEAGMQLL 372
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DB 220 YI-----CNV-----NHKP----- 228
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QY 373 SSGGVLLSNIKVLTWTSTPVEPKSCDTHTCPPAPABELLGGPSVFLPPPKQDTLMI 432
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DB 229 -----SNTKV-----DKVPEPKSCDTHTCPPAPABELLGGPSVFLPPPKQDTLMI 275
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QY 433 SRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPRREOYNSTYRVVSVLTVLHODW 492
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RESULT 100
US-10-363-427-10
; Sequence 10, Application US/10363427
; Publication No. US20030195338A1
; GENERAL INFORMATION:
; APPLICANT: Medexgen Inc.
; APPLICANT: CHUNG, Yong Hoon

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; APPLICANT: HAN, Ji Woong
; APPLICANT: LEE, Hye Ja
; APPLICANT: CHOI, Eun Yong
; APPLICANT: KIM, Jin Mi
; APPLICANT: YIM, Soo Bin
; TITLE OF INVENTION: Concatameric Immunoadhesion
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/363,427
; CURRENT FILING DATE: 2003-02-28
; NUMBER OF SEQ ID NOS: 52
; SOFTWARE: Kopatentin 1.71
; SEQ ID NO 10
; LENGTH: 608
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-363-427-10

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Query Match      37.3%; Score 1273.5; DB 14; Length 608;
Best Local Similarity 83.3%; Pred. No. 4.7e-81;
Matches 244; Conservative 8; Mismatches 28; Indels 13; Gaps 2;

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QY 346 NKEAVSKREKPVWVLNPEAGM-----QCLSDSGQVLE-----SNIKVLPWTST 392
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DB 315 NGTVHLSCQEKQNTVCTCHAGFFLRENECVSCSNCKSLCTKLCIPIQIENYKGTEDSGT 374
   |||  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|
QY 393 PVEPKSCDTHTCPPCPAPABELLGGPSVFLPPPKQDTLMISTPTEVTCVVDVSHEDPEV 452
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DB 375 TAEPKSCDTHTCPPCPAPABELLGGPSVFLPPPKQDTLMISTPTEVTCVVDVSHEDPEV 434
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QY 453 KFNWYVDGVEVHNAKTKPREEOYNSTYRVVSVLTVLHODMLNGKEYKCVSNKALPAPIE 512
   |||  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|  :|
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QY 513 KTISKAKGPRREPQVYTLPPSRDELTKNOVSLTCLVKGFFPSDIAVEMESNGQPENNYKT 572
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: August 3, 2004, 13:01:34 ; Search time 19.0695 Seconds
(without alignments)
1754.300 Million cell updates/sec

Title: SEQ3
Perfect score: 3414
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Scoring table: BLOSUM62
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Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 125 summaries

Database : Issued Patents AA:*
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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

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5	2151	63.0	530	3	US-08-485-372A-4
6	2151	63.0	530	4	US-09-409-006A-4
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31	2035	59.6	462	5	PCT-US95-00454-5	Sequence 5, Appli
32	2030	59.5	458	4	US-08-328-500-9	Sequence 9, Appli
33	2029	59.4	437	2	US-08-284-391B-29	Sequence 29, Appli
34	2029	59.4	398	3	US-09-218-950-29	Sequence 29, Appli
35	2024	59.3	458	3	US-09-039-555B-15	Sequence 15, Appli
36	2017	59.1	402	1	US-08-236-311-1	Sequence 1, Appli
37	2017	59.1	402	1	US-08-457-918-1	Sequence 1, Appli
38	2016	59.1	458	4	US-09-517-605-3	Sequence 3, Appli
39	2001	58.6	394	3	US-08-466-368-2	Sequence 2, Appli
40	2001	58.6	394	4	US-08-328-500-2	Sequence 2, Appli
41	1998	58.5	458	6	5223394-7	Patent No. 5223394
42	1951	57.1	394	6	5223394-2	Patent No. 5223394
43	1904	55.8	434	1	US-08-236-311-4	Sequence 4, Appli
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45	1901	55.7	433	2	US-08-867-149-1	Sequence 1, Appli
46	1901	55.7	433	2	US-08-808-374-1	Sequence 1, Appli
47	1896	55.5	433	3	US-09-100-409A-1	Sequence 1, Appli
48	1704	48.9	433	6	5171838-13	Patent No. 5171838
49	1599.5	46.9	410	3	US-08-630-172-17	Sequence 17, Appli
50	1599.5	46.9	410	3	US-09-375-419-17	Sequence 17, Appli
51	1385	40.6	254	2	US-08-284-391B-33	Sequence 33, Appli
52	1385	40.6	254	3	US-09-218-950-33	Sequence 33, Appli
53	1368	40.1	318	6	5223394-11	Patent No. 5223394
54	1363	38.9	295	6	5223394-9	Patent No. 5223394
55	1260	38.7	592	4	US-09-313-942-8	Sequence 8, Appli
56	1292	37.8	622	4	US-09-499-846-2	Sequence 2, Appli
57	1288.5	37.7	459	1	US-08-157-101A-7	Sequence 7, Appli
58	1286.5	37.7	446	3	US-08-397-411-7	Sequence 7, Appli
59	1281.5	37.5	497	4	US-09-499-846-6	Sequence 6, Appli
60	1281.5	37.5	525	4	US-09-499-846-4	Sequence 4, Appli
61	1278.5	37.4	454	2	US-07-934-373C-22	Sequence 22, Appli
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63	1278.5	37.4	454	4	US-08-146-206C-22	Sequence 22, Appli
64	1278.5	37.4	454	4	US-09-705-686-22	Sequence 22, Appli
65	1278.5	37.4	454	5	PCT-US93-07322-22	Sequence 22, Appli
66	1277.5	37.4	473	3	US-09-049-672A-4	Sequence 4, Appli
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70	1275.5	37.4	453	4	US-09-301-593-18	Sequence 18, Appli
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85	1268.5	37.2	468	4	US-09-485-737B-67	Sequence 67, Appli
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88	1268	37.1	451	4	US-09-247-352-3	Sequence 3, Appli
89	1268	37.1	451	4	US-09-466-635-3	Sequence 3, Appli
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92	1267.5	37.1	376	4	US-09-180-100-22	Sequence 22, Appli
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98	1267.5	37.1	453	4	US-09-524-100C-6	Sequence 6, Appli
99	1267.5	37.1	488	3	US-08-776-511-2	Sequence 2, Appli
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112 1266 37.1 451 4 US-09-920-171-18 Sequence 18, Appl
113 1266 37.1 476 2 US-08-378-939-10 Sequence 10, Appl
114 1266 37.1 547 4 US-08-466-151-8 Sequence 8, Appl
115 1266 37.1 547 4 US-09-746-359A-54 Sequence 54, Appl
116 1265.5 37.1 467 3 US-09-049-672A-8 Sequence 8, Appl
117 1263.5 37.0 462 4 US-09-289-942A-7 Sequence 7, Appl
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123 1262 37.0 476 3 US-08-487-550-4 Sequence 4, Appl
124 1262 37.0 476 4 US-09-526-098-4 Sequence 4, Appl
125 1262 37.0 478 3 US-08-487-550-8 Sequence 8, Appl

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ALIGNMENTS

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RESULT 1
US-08-472-888A-6
; Sequence 6, Application US/08472888A
; Patent No. 6613746

```

GENERAL INFORMATION:

```

APPLICANT: Seed, Brian
APPLICANT: Walz, Gerd
TITLE OF INVENTION: AGP-ANTIBODY FUSION PROTEINS
TITLE OF INVENTION: AND RELATED MOLECULES AND METHODS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSER: Clark & Elbing LLP
STREET: 176 Federal Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/472,888A
FILING DATE: 07-JUN-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/618,314
FILING DATE: 23-NOV-1990
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/258001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
TELEX:

```

INFORMATION FOR SEQ ID NO: 6:

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SEQUENCE CHARACTERISTICS:
LENGTH: 630 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: linear

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MOLECULE TYPE: protein
US-08-472-888A-6

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Query Match 94.6%; Score 3231; DB 4; Length 630;
Best Local Similarity Pred. NO. 5.1e-252;
Matches 621; Conservative 0; Mismatches 2; Indels 8; Gaps 3;

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QY 1 MNRGVPRRHLLVQLALPAATGKNVVLGKKDVTLETCTASQKSIQPHMKNNOIK 60
DB 1 MNRGVPRRHLLVQLALPAATGKNVVLGKKDVTLETCTASQKSIQPHMKNNOIK 60
QY 61 ILNGQSFLLTKGPKSLNDRADSRRLMDQGNFPLIINLKIETSDTYICEVEDQKEVQL 120
DB 61 ILNGQSFLLTKGPKSLNDRADSRRLMDQGNFPLIINLKIETSDTYICEVEDQKEVQL 120
QY 121 LVFGLTNSPTHLLOGSLTLTLESPPGSSPSVCCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTNSPTHLLOGSLTLTLESPPGSSPSVCCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWCTVVLQONQKVEFKIDIVLAFQKASSIVYKKEGQVEFSPPLAFTVEKLTGSGELMW 240
DB 181 TWCTVVLQONQKVEFKIDIVLAFQKASSIVYKKEGQVEFSPPLAFTVEKLTGSGELMW 240
QY 241 QAEPASSSKSWITFDLKNKEVSVKRVTDPRKQNGKLPILHLTPQLPQYAGSGNTTLA 300
DB 241 QAEPASSSKSWITFDLKNKEVSVKRVTDPRKQNGKLPILHLTPQLPQYAGSGNTTLA 300
QY 301 LEAKTGKHOEVLVVMRATQLOKNTLCEVAGPTSPKLMSTLKENKEAKVSKREKVMV 360
DB 301 LEAKTGKHOEVLVVMRATQLOKNTLCEVAGPTSPKLMSTLKENKEAKVSKREKVMV 360
QY 361 LNPAGMOCCLISDQGVLLSNIKVLPTWSTPV-----EPKSCDKHTTCPPCAPBEL 414
DB 361 LNPAGMOCCLISDQGVLLSNIKVLPTWSTPVHADPEBEPKSCDKHTTCPPCAPBEL 420
QY 415 GGPSVFLFPPPKDQTLMSRTPEYTCVVVDVSHEDPEVKRWYVDGVEVNAKTKPREEQ 474
DB 415 GGPSVFLFPPPKDQTLMSRTPEYTCVVVDVSHEDPEVKRWYVDGVEVNAKTKPREEQ 479
QY 421 GGPSVFLFPPPKDQTLMSRTPEYTCVVVDVSHEDPEVKRWYVDGVEVNAKTKPREEQ 479
DB 421 GGPSVFLFPPPKDQTLMSRTPEYTCVVVDVSHEDPEVKRWYVDGVEVNAKTKPREEQ 479
QY 475 YNSTYRVASVLTVLHODMLNGKEYKCVSNKALPALEKTSKAKGQPREPOVYTLPPSR 534
DB 475 YNSTYRVASVLTVLHODMLNGKEYKCVSNKALPALEKTSKAKGQPREPOVYTLPPSR 538
QY 480 YNSTYR-WSVLTVLHODMLNGKEYKCVSNKALPALEKTSKAKGQPREPOVYTLPPSR 538
DB 480 YNSTYR-WSVLTVLHODMLNGKEYKCVSNKALPALEKTSKAKGQPREPOVYTLPPSR 538
QY 535 DELTKNOVSLTCLVKGFPSPDIQVEMESNGCPENNYKTPPVLDSDSFFLYSKLTVYDKS 594
DB 535 DELTKNOVSLTCLVKGFPSPDIQVEMESNGCPENNYKTPPVLDSDSFFLYSKLTVYDKS 598
QY 539 DELTKNOVSLTCLVKGFPSPDIQVEMESNGCPENNYKTPPVLDSDSFFLYSKLTVYDKS 598
DB 539 DELTKNOVSLTCLVKGFPSPDIQVEMESNGCPENNYKTPPVLDSDSFFLYSKLTVYDKS 598
QY 595 RMQGNVFSQSVNHEALHNHYTQKSLSLSPG 625
DB 595 RMQGNVFSQSVNHEALHNHYTQKSLSLSPG 629
QY 599 RMQGNVFSQSVNHEALHNHYTQKSLSLSPG 629
DB 599 RMQGNVFSQSVNHEALHNHYTQKSLSLSPG 629

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RESULT 2

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US-08-477-460B-4
; Sequence 4, Application US/08477460B
; Patent No. 6034223

```

GENERAL INFORMATION:

```

APPLICANT: Progenics Pharmaceuticals, Inc.
TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSER: Cooper & Dunham
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10112

```

COMPUTER READABLE FORM:

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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.24

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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/477,460B
FILING DATE: 07-JUN-1995
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/927,931
FILING DATE: 07-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPW/AJM
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 977-9550
TELEFAX: (212) 977-9809
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 530 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-08-477-460B-4

Query Match 63.0%; Score 2151; DB 3; Length 530;
Best Local Similarity 70.4%; Pred. No. 4.6e-165;
Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

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QY 1 MNRGVPFRHLLLVLOALPPAATQGNKVYLGKGGDTVELTCTASQKSIQFHMKNSNQIK 60
DB 1 MNRGVPFRHLLLVLOALPPAATQGNKVYLGKGGDTVELTCTASQKSIQFHMKNSNQIK 60
QY 61 ILGNQGSFLTKGSPSLNDRADSRSLMDQGNFPLIKLIKIEDSPDYICEVEDQKEEYQL 120
DB 61 ILGNQGSFLTKGSPSLNDRADSRSLMDQGNFPLIKLIKIEDSPDYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDFHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDFHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNOQKVEKIDIVLAFQKASSIYKKKEGVEFSPFLAFYVEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKVEKIDIVLAFQKASSIYKKKEGVEFSPFLAFYVEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTPDKLQMGKCLPLHLTLPOALPOYAG---SGNL 297
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTPDKLQMGKCLPLHLTLPOALPOYAG---SGNL 297
QY 298 TLALBAKTKGLHQBVLVVMRATOL-QKNLTCEVMGPTSPKMLSLKLENKBAKVSXREK 356
DB 298 TLALBAKTKGLHQBVLVVMRATOL-QKNLTCEVMGPTSPKMLSLKLENKBAKVSXREK 356
QY 357 PAVVAVLPAAGMOCCLSDSGQVLLBSNITKYLPTMSTPVEPKSCDKHTHTCPCPAPPELLGG 416
DB 357 PAVVAVLPAAGMOCCLSDSGQVLLBSNITKYLPTMSTPVEPKSCDKHTHTCPCPAPPELLGG 416
QY 417 PSVFLPFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKFMNYYVDGVEVNAKTKPREEOYN 476
DB 417 PSVFLPFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKFMNYYVDGVEVNAKTKPREEOYN 476
QY 477 STYRVVSVLTVLHQDMLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPOVYTLPPSDE 536
DB 477 STYRVVSVLTVLHQDMLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPOVYTLPPSDE 536
QY 537 LTRKQVSLTCLVKGFPYSDIAVEMESNQGPENNYKTTTPVLDSDGSFFLYSKLTVYDKSRW 596
DB 537 LTRKQVSLTCLVKGFPYSDIAVEMESNQGPENNYKTTTPVLDSDGSFFLYSKLTVYDKSRW 596
QY 597 OQGNVFCSCVMHEALHNHYTOKSLSLSPG 625
DB 597 OQGNVFCSCVMHEALHNHYTOKSLSLSPG 625
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DB 501 OQGNVFCSCVMHEALHNHYTOKSLSLSPG 529

RESULT 3

US-08-379-516-4
Sequence 4, Application US/08379516
Patent No. 6083478
GENERAL INFORMATION:
APPLICANT: Allaway, Graham P.
APPLICANT: Madden, Paul J.
TITLE OF INVENTION: No. 6083478-Peptide1 Moieity-Conjugated CD4-Gamma2 and CD4-1gG2
FILE REFERENCE: 41215-A-PCT-US
CURRENT APPLICATION NUMBER: US/08/379,516
CURRENT FILING DATE: 1996-06-10
EARLIER APPLICATION NUMBER: PCT/US93/07422
EARLIER FILING DATE: 1993-08-06
EARLIER APPLICATION NUMBER: 07/927,931
EARLIER FILING DATE: 1992-08-07
NUMBER OF SEQ ID NOS: 9
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO: 4
LENGTH: 530
TYPE: PRT
ORGANISM: Homo sapiens
US-08-379-516-4

Query Match 63.0%; Score 2151; DB 3; Length 530;
Best Local Similarity 70.4%; Pred. No. 4.6e-165;
Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

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QY 1 MNRGVPFRHLLLVLOALPPAATQGNKVYLGKGGDTVELTCTASQKSIQFHMKNSNQIK 60
DB 1 MNRGVPFRHLLLVLOALPPAATQGNKVYLGKGGDTVELTCTASQKSIQFHMKNSNQIK 60
QY 61 ILGNQGSFLTKGSPSLNDRADSRSLMDQGNFPLIKLIKIEDSPDYICEVEDQKEEYQL 120
DB 61 ILGNQGSFLTKGSPSLNDRADSRSLMDQGNFPLIKLIKIEDSPDYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDFHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDFHLLQGGSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNOQKVEKIDIVLAFQKASSIYKKKEGVEFSPFLAFYVEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKVEKIDIVLAFQKASSIYKKKEGVEFSPFLAFYVEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTPDKLQMGKCLPLHLTLPOALPOYAG---SGNL 297
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTPDKLQMGKCLPLHLTLPOALPOYAG---SGNL 297
QY 298 TLALBAKTKGLHQBVLVVMRATOL-QKNLTCEVMGPTSPKMLSLKLENKBAKVSXREK 356
DB 298 TLALBAKTKGLHQBVLVVMRATOL-QKNLTCEVMGPTSPKMLSLKLENKBAKVSXREK 356
QY 357 PAVVAVLPAAGMOCCLSDSGQVLLBSNITKYLPTMSTPVEPKSCDKHTHTCPCPAPPELLGG 416
DB 357 PAVVAVLPAAGMOCCLSDSGQVLLBSNITKYLPTMSTPVEPKSCDKHTHTCPCPAPPELLGG 416
QY 417 PSVFLPFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKFMNYYVDGVEVNAKTKPREEOYN 476
DB 417 PSVFLPFPKPKDITLMISRTPEVTCVVVDVSHEDPEVKFMNYYVDGVEVNAKTKPREEOYN 476
QY 477 STYRVVSVLTVLHQDMLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPOVYTLPPSDE 536
DB 477 STYRVVSVLTVLHQDMLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPOVYTLPPSDE 536
QY 537 LTRKQVSLTCLVKGFPYSDIAVEMESNQGPENNYKTTTPVLDSDGSFFLYSKLTVYDKSRW 596
DB 537 LTRKQVSLTCLVKGFPYSDIAVEMESNQGPENNYKTTTPVLDSDGSFFLYSKLTVYDKSRW 596
QY 597 OQGNVFCSCVMHEALHNHYTOKSLSLSPG 625
DB 597 OQGNVFCSCVMHEALHNHYTOKSLSLSPG 625
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Db 501 QCGNVFSCSVNHEALHNHYTQKSLSLSPG 529

RESULT 4
US-09-329-916-4
Sequence 4, Application US/09329916
Patent No. 6177549
GENERAL INFORMATION:
APPLICANT: Progenics Pharmaceuticals, Inc.
TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
TITLE OF INVENTION: CD4-GAMMA2 AND CD4-IgG2 IMMUNOCONJUGATES, AND USES THEREOF
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Cooper & Dunham
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10112
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/329,916
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/477,460
FILING DATE: 07-JUN-1995
APPLICATION NUMBER: US 07/927,931
FILING DATE: 07-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPM/ALM
TELEPHONE: (212) 977-9550
TELEFAX: (212) 977-9809
TELEX: 422523 COOP UT
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 530 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-09-329-916-4

Query Match 63.0%; Score 2151; DB 3; Length 530;
Best Local Similarity 70.4%; Pred. No. 4,6e-165;
Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

QY 1 NMRGVPFPHLLVLTGALLPATQGNKVVLGKKGDTVELCTGASQKSIQPHMKNQNIK 60
DB 1 NMRGVPFPHLLVLTGALLPATQGNKVVLGKKGDTVELCTGASQKSIQPHMKNQNIK 60
QY 61 ILGNQGSFLTKGSPSLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILGNQGSFLTKGSPSLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGILTANSDTHLLGOSITLTLESPGSSPSVQCRSPRGKNIQCGKTLVSQLELQDSG 180
DB 121 LVFGILTANSDTHLLGOSITLTLESPGSSPSVQCRSPRGKNIQCGKTLVSQLELQDSG 180
QY 181 TWTCVTVLNOKKVEERKIDIVLAIFQKASSIYKKEGEQVEPSPLAFVKEKLTGSGELMW 240
DB 181 TWTCVTVLNOKKVEERKIDIVLAIFQKASSIYKKEGEQVEPSPLAFVKEKLTGSGELMW 240
QY 181 TWTCVTVLNOKKVEERKIDIVLAIFQKASSIYKKEGEQVEPSPLAFVKEKLTGSGELMW 240
DB 181 TWTCVTVLNOKKVEERKIDIVLAIFQKASSIYKKEGEQVEPSPLAFVKEKLTGSGELMW 240

QY 241 QAERASSKSWITFDLKNKEVSVRVTQDPKLGKCLPLHLTLPOALPOYAG--SGNL 297
DB 217 -----PCSRSTSESTAALGCLVKDYFPPEPVTVSNMGALTSGVH 255
QY 298 TLALBAKTKGLHGVNLVWBARQL-QKNLTCEVWGTPSPMLSLKENBAVSKREK 356
DB 256 TFPVAVLQSSGLYSLSVTVTPSSNFGTYTCNV-----DHK 292
QY 357 PVMVLNDEAGMWQCLLSDSQVLLSNNIKVLPTWSTVEPEKSCDHTHCPCPAPPELLG 416
DB 293 P-----SNTKYDKT-----VERKCYB---CPCCPAP--VAG 320
QY 417 PSVFLPPPKPDITMISRTPEVTCVVVDVSHEDPEVKFNNYVDDGEVHNAAKTRPEEQYN 476
DB 321 PSVFLPPPKPDITMISRTPEVTCVVVDVSHEDPEVQFNNYVDDGEVHNAAKTRPEEQFN 380
QY 477 STYRVSVLTLYLHODMNLNGEKYKCKVSNKGLPAPIETKISAKQOPREPOVYTLPPSRDE 536
DB 381 STYRVSVLTLYLHODMNLNGEKYKCKVSNKGLPAPIETKISAKQOPREPOVYTLPPSRDE 440
QY 537 LTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPPVLDSDGSFFLYSKLTVDKSRW 596
DB 441 MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPPPVLDSDGSFFLYSKLTVDKSRW 500
QY 597 QCGNVFSCSVNHEALHNHYTQKSLSLSPG 625
DB 501 QCGNVFSCSVNHEALHNHYTQKSLSLSPG 529

RESULT 5
US-08-485-372A-4
Sequence 4, Application US/08485372A
Patent No. 6187748
GENERAL INFORMATION:
APPLICANT: Beaudry, Gary A.
APPLICANT: Madden, Paul J.
TITLE OF INVENTION: CD4-GAMMA2 CD4-IgG2 CHIMERAS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Cooper & Dunham LLP
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/485,372A
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/476,227
FILING DATE: 07-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 37690-II-A
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 278-0400
TELEFAX: (212) 391-0525
TELEX:
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 530 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:

ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-08-485-372A-4

Query Match 63.0%; Score 2151; DB 3; Length 530;
Best Local Similarity 70.4%; Pred. No. 4.6e-165;
Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

QY 1 MNRGVFRHLLVLDLALLPAATQGNKVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60
DB 1 MNRGVFRHLLVLDLALLPAATQGNKVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60
QY 61 ILGNQGSFLTKGSPSKLNDRADSRSLMDQGNFPLIKLKIEDSDTYICEVEDQKEEYOL 120
DB 61 ILGNQGSFLTKGSPSKLNDRADSRSLMDQGNFPLIKLKIEDSDTYICEVEDQKEEYOL 120
QY 121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVLOKOKKVEFKIDIVVLAFOKASSIVYKKEGOVEFSPFLAFVTEKLTGSGELMW 240
DB 181 TWTCVLOKOKKVEFKIDIVVLAFOKASSIVYKKEGOVEFSPFLAFVTEKLTGSGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRYTODPKLOMGKRLPLHLTPQALPOYAG---SGNL 297
DB 241 QAERASSSSKSWITFDLKNKEVSVKRYTODPKLOMGKRLPLHLTPQALPOYAG---SGNL 297
QY 298 TLALEAKTGKLEHOENVLVVMRATOL-QKNLTCEVWGPTSPKMLSLKLENKAIVSKREK 356
DB 298 TLALEAKTGKLEHOENVLVVMRATOL-QKNLTCEVWGPTSPKMLSLKLENKAIVSKREK 356
QY 357 PWMVNLPAAGMOCCLSDSGOVLLESNIKVLPTMSTPVEPKSCDKTHTCPCPAPPELLGG 416
DB 357 PWMVNLPAAGMOCCLSDSGOVLLESNIKVLPTMSTPVEPKSCDKTHTCPCPAPPELLGG 416
QY 417 PSVFLPFPKPDLMISRTPEVTCVVVDVSHEDPEVKFMVYDGEVNAKTKRPREEOYN 476
DB 417 PSVFLPFPKPDLMISRTPEVTCVVVDVSHEDPEVKFMVYDGEVNAKTKRPREEOYN 476
QY 477 STYRVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 536
DB 477 STYRVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 536
QY 537 LTKNOVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGSEFFLYSKLTVDKSRW 596
DB 537 LTKNOVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGSEFFLYSKLTVDKSRW 596
QY 597 QQGNVFSCSVMEHALHNHYTOKSLSLSPG 625
DB 597 QQGNVFSCSVMEHALHNHYTOKSLSLSPG 625

RESULT 6
US-09-409-006A-4
Sequence 4, Application US/09409006A
Patent No. 6342586
GENERAL INFORMATION:
APPLICANT: Progenics Pharmaceutical, Inc.
TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10112
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/409,006A
FILING DATE: 29-SEP-1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/927,931
FILING DATE: 07-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPW/AJM
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 977-9550
TELEFAX: (212) 977-9809
TELEX: 422523 COOP UT
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 530 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: CDNA
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-09-409-006A-4

Query Match 63.0%; Score 2151; DB 4; Length 530;
Best Local Similarity 70.4%; Pred. No. 4.6e-165;
Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

QY 1 MNRGVFRHLLVLDLALLPAATQGNKVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60
DB 1 MNRGVFRHLLVLDLALLPAATQGNKVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60
QY 61 ILGNQGSFLTKGSPSKLNDRADSRSLMDQGNFPLIKLKIEDSDTYICEVEDQKEEYOL 120
DB 61 ILGNQGSFLTKGSPSKLNDRADSRSLMDQGNFPLIKLKIEDSDTYICEVEDQKEEYOL 120
QY 121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVLOKOKKVEFKIDIVVLAFOKASSIVYKKEGOVEFSPFLAFVTEKLTGSGELMW 240
DB 181 TWTCVLOKOKKVEFKIDIVVLAFOKASSIVYKKEGOVEFSPFLAFVTEKLTGSGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRYTODPKLOMGKRLPLHLTPQALPOYAG---SGNL 297
DB 241 QAERASSSSKSWITFDLKNKEVSVKRYTODPKLOMGKRLPLHLTPQALPOYAG---SGNL 297
QY 298 TLALEAKTGKLEHOENVLVVMRATOL-QKNLTCEVWGPTSPKMLSLKLENKAIVSKREK 356
DB 298 TLALEAKTGKLEHOENVLVVMRATOL-QKNLTCEVWGPTSPKMLSLKLENKAIVSKREK 356
QY 357 PWMVNLPAAGMOCCLSDSGOVLLESNIKVLPTMSTPVEPKSCDKTHTCPCPAPPELLGG 416
DB 357 PWMVNLPAAGMOCCLSDSGOVLLESNIKVLPTMSTPVEPKSCDKTHTCPCPAPPELLGG 416
QY 417 PSVFLPFPKPDLMISRTPEVTCVVVDVSHEDPEVKFMVYDGEVNAKTKRPREEOYN 476
DB 417 PSVFLPFPKPDLMISRTPEVTCVVVDVSHEDPEVKFMVYDGEVNAKTKRPREEOYN 476
QY 477 STYRVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 536
DB 477 STYRVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 536
QY 537 LTKNOVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGSEFFLYSKLTVDKSRW 596
DB 537 LTKNOVSLTCLVKGFPYSDIAVEWESNGQPENNYKTTTPVLDSGSEFFLYSKLTVDKSRW 596
QY 597 QQGNVFSCSVMEHALHNHYTOKSLSLSPG 625
DB 597 QQGNVFSCSVMEHALHNHYTOKSLSLSPG 625

Db 501 OQGNVFCSCVMHEALHNHYTQKSLSPG 529

RESULT 7

US-08-484-681-4
 ; Sequence 4, Application US/08484681
 ; Patent No. 6451313
 ; GENERAL INFORMATION:
 ; APPLICANT: Beaudry, Gary A.
 ; APPLICANT: Maddon, Paul J.
 ; TITLE OF INVENTION: CD4-GAMMA2 CD4-IGG2 CHIMERAS
 ; NUMBER OF SEQUENCES: 9
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Cooper & Dunham LLP
 ; STREET: 1185 Avenue of the Americas
 ; CITY: New York
 ; STATE: New York
 ; COUNTRY: USA
 ; ZIP: 10036
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentin Release #1.24
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/484,681
 ; FILING DATE: 07-JUN-1995
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: White, John P.
 ; REGISTRATION NUMBER: 28,678
 ; REFERENCE/DOCKET NUMBER: 37690-II-B
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (212) 278-0400
 ; TELEFAX: (212) 391-0525
 ; TELEX:
 ; INFORMATION FOR SEQ ID NO: 4:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 530 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: unknown
 ; TOPOLOGY: unknown
 ; MOLECULE TYPE: cDNA
 ; ORIGINAL SOURCE:
 ; ORGANISM: homo sapien
 ; CELL TYPE: lymphocyte
 ; US-08-484-681-4

Query Match 63.0%; Score 2151; DB 4; Length 530;

Best Local Similarity 70.4%; Pred. No. 4,6e-165;
 Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

QY 1 MNRGVPFPHLLIVLQALIPATQGNKYVLGKGTVELTCTAGSQKSIQTHWKNQNOIK 60
 Db 1 MNRGVPFPHLLIVLQALIPATQGNKYVLGKGTVELTCTAGSQKSIQTHWKNQNOIK 60
 QY 61 ILNGSGFLTKGSPKLNDRASRLMDQGNPFLIKLKTEDSTTYICEVEDQKEEYQL 120
 Db 61 ILNGSGFLTKGSPKLNDRASRLMDQGNPFLIKLKTEDSTTYICEVEDQKEEYQL 120
 QY 121 LVFGLTANSDFHLQGGOSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 Db 121 LVFGLTANSDFHLQGGOSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIVYKKEGBOVESFPIAFTVEKLTGSGELMW 240
 Db 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIVYKKEGBOVESFPIAFTVEKLTGSGELMW 240
 QY 241 QAERASSSKSWITFLPKKKEVSVKRVTDQPKLQWQKXLPKHILTLQALPOYAG---SGNL 297
 Db 241 QAERASSSKSWITFLPKKKEVSVKRVTDQPKLQWQKXLPKHILTLQALPOYAG---SGNL 297
 QY 217 -----PCSRSTSESTALGLCLVKDYFPEPVTVMNSGALTSGVH 255
 Db 217 -----PCSRSTSESTALGLCLVKDYFPEPVTVMNSGALTSGVH 255

QY 298 TLALBAKTKLHDEVLVNRATQL-QKNLTCEVMGPTSPKMLSLKLENKAVSRREK 356
 Db 298 TLALBAKTKLHDEVLVNRATQL-QKNLTCEVMGPTSPKMLSLKLENKAVSRREK 356
 QY 256 TFPVAVLQSSGLYSLSVTVVPSNFGTQYTCNV-----DHK 292
 Db 256 TFPVAVLQSSGLYSLSVTVVPSNFGTQYTCNV-----DHK 292
 QY 357 PWTVLNPEAGMOCCLSDSQVLLSEINIKVLPWTSTVEPKSCDKHTCPCPAPPELLGG 416
 Db 357 PWTVLNPEAGMOCCLSDSQVLLSEINIKVLPWTSTVEPKSCDKHTCPCPAPPELLGG 416
 QY 293 P-----SNTKYVDKTV-----VERKCV-----CPCCPAP-VAG 320
 Db 293 P-----SNTKYVDKTV-----VERKCV-----CPCCPAP-VAG 320
 QY 417 PSVFLPFPKPDOTLMISRTPEVTCVVVDVSHEDPEVKFNKYVDGVEYHNAKTKRREQYN 476
 Db 417 PSVFLPFPKPDOTLMISRTPEVTCVVVDVSHEDPEVKFNKYVDGVEYHNAKTKRREQYN 476
 QY 321 PSVFLPFPKPDOTLMISRTPEVTCVVVDVSHEDPEVKFNKYVDGVEYHNAKTKRREQYN 380
 Db 321 PSVFLPFPKPDOTLMISRTPEVTCVVVDVSHEDPEVKFNKYVDGVEYHNAKTKRREQYN 380
 QY 477 STYRVSVLTVLHQMVGNGEKYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 536
 Db 477 STYRVSVLTVLHQMVGNGEKYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 536
 QY 381 STFRVSVLTVHQMVGNGEKYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 440
 Db 381 STFRVSVLTVHQMVGNGEKYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 440
 QY 537 LTRQVSVLTVLHQMVGNGEKYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 596
 Db 537 LTRQVSVLTVLHQMVGNGEKYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 596
 QY 441 MTKQVSVLTVLHQMVGNGEKYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 500
 Db 441 MTKQVSVLTVLHQMVGNGEKYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDE 500
 QY 597 OQGNVFCSCVMHEALHNHYTQKSLSPG 625
 Db 597 OQGNVFCSCVMHEALHNHYTQKSLSPG 625
 QY 501 OQGNVFCSCVMHEALHNHYTQKSLSPG 529
 Db 501 OQGNVFCSCVMHEALHNHYTQKSLSPG 529

RESULT 8

PCT-US93-07422-4
 ; Sequence 4, Application PC/TUS9307422

GENERAL INFORMATION:
 ; APPLICANT: Progenics Pharmaceuticals, Inc.
 ; TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
 ; TITLE OF INVENTION: CD4-GAMMA2 AND CD4-IGG2 IMMUNOCONJUGATES, AND USES THEREOF
 ; NUMBER OF SEQUENCES: 9
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Cooper & Dunham
 ; STREET: 30 Rockefeller Plaza
 ; CITY: New York
 ; STATE: New York
 ; COUNTRY: USA
 ; ZIP: 10112
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentin Release #1.24
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: PCT/US93/07422
 ; FILING DATE: 19930806
 ; CLASSIFICATION:
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/927,931
 ; FILING DATE: 07-AUG-1992
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: White, John P.
 ; REGISTRATION NUMBER: 28,678
 ; REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPW/AJM
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (212) 977-9550
 ; TELEFAX: (212) 977-9809
 ; TELEX: 422523 COOP UI
 ; INFORMATION FOR SEQ ID NO: 4:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 530 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: unknown
 ; TOPOLOGY: unknown
 ; MOLECULE TYPE: cDNA
 ; ORIGINAL SOURCE:
 ; ORGANISM: homo sapien
 ; CELL TYPE: lymphocyte
 ; PCT-US93-07422-4

Query Match 63.0%; Score 2151; DB 5; Length 530;

Best Local Similarity 70.4%; Pred. No. 4.6e-165;
Matches 443; Conservative 26; Mismatches 56; Indels 104; Gaps 11;

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QY 1 MNRGVPFRHLIVLQALLPAAATQGNKVVLGKGGDTVELTCTASQKKSIOFHMKNSNOIK 60
DB 1 MNRGVPFRHLIVLQALLPAAATQGNKVVLGKGGDTVELTCTASQKKSIOFHMKNSNOIK 60
QY 61 ILGNQSFPLTKGSKLNDRAISRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEYOL 120
DB 61 ILGNQSFPLTKGSKLNDRAISRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEYOL 120
QY 121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCTVLQOKKVEFKIDIVLAFQKASSIYKKEGEQVEFSPLAFTYBEKLTGSGELMW 240
DB 181 TWTCTVLQOKKVEFKIDIVLAFQKASSIYKKEGEQVEFSPLAFTYBEKLTGSGELMW 240
QY 241 QAERASSKSWITFDLKNKEVSVKRVTOPDKLQMGKKLPLHLTLPOALPOYAG---SGNL 297
DB 241 QAERASSKSWITFDLKNKEVSVKRVTOPDKLQMGKKLPLHLTLPOALPOYAG---SGNL 297
QY 298 TLALAKTGKLGQEVNLVVMRATQL-QKNLTCEVWGPTSPKMLSLKENKEAKVSKREK 356
DB 298 TLALAKTGKLGQEVNLVVMRATQL-QKNLTCEVWGPTSPKMLSLKENKEAKVSKREK 356
QY 357 PVVAVLPEAGMOCCLSDSGVLLBSNIVKLPWTSTFVPEBKSDKTHTCPPCAPBLLGG 416
DB 357 PVVAVLPEAGMOCCLSDSGVLLBSNIVKLPWTSTFVPEBKSDKTHTCPPCAPBLLGG 416
QY 417 PSVFLPPPKPOTLMTSRPEVTCVVVDVSHEDPEVKFMVYDGVVHNAKTKPREQYN 476
DB 417 PSVFLPPPKPOTLMTSRPEVTCVVVDVSHEDPEVKFMVYDGVVHNAKTKPREQYN 476
QY 477 STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPOVYTLPPSRDE 536
DB 477 STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPOVYTLPPSRDE 536
QY 537 LFTNQVSLTCLLVGFYPSDIAVWESNQPENNYKTTTPVLDSGSEFLLYSKLTVDKSKW 596
DB 537 LFTNQVSLTCLLVGFYPSDIAVWESNQPENNYKTTTPVLDSGSEFLLYSKLTVDKSKW 596
QY 597 QCGNVFSCSVMEALHNHYTQKSLSLSPG 625
DB 597 QCGNVFSCSVMEALHNHYTQKSLSLSPG 625

RESULT 9
US-08-477-460B-2
Sequence 2, Application US/08477460B
Patent No. 6034223
GENERAL INFORMATION:
APPLICANT: Progenics Pharmaceuticals, Inc.
TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
TITLE OF INVENTION: CD4-GAMMA2 AND CD4-19G2 IMMUNOCONJUGATES, AND USES THEREOF
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESS: Cooper & Dunham
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10112
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/477,460B
FILING DATE: 07-JUN-1995
CLASSIFICATION: 530
```

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/927,931
FILING DATE: 07-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPM/AJM
TELEPHONE: (212) 977-9550
TELEFAX: (212) 977-9809
TELEX: 422523 COOP UT
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-08-477-460B-2

Query Match 60.8%; Score 2077; DB 3; Length 432;
Best Local Similarity 66.1%; Pred. No. 3.2e-159;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

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QY 1 MNRGVPFRHLIVLQALLPAAATQGNKVVLGKGGDTVELTCTASQKKSIOFHMKNSNOIK 60
DB 1 MNRGVPFRHLIVLQALLPAAATQGNKVVLGKGGDTVELTCTASQKKSIOFHMKNSNOIK 60
QY 61 ILGNQSFPLTKGSKLNDRAISRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEYOL 120
DB 61 ILGNQSFPLTKGSKLNDRAISRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEYOL 120
QY 121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDBTHLLOQOSLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCTVLQOKKVEFKIDIVLAFQKASSIYKKEGEQVEFSPLAFTYBEKLTGSGELMW 240
DB 181 TWTCTVLQOKKVEFKIDIVLAFQKASSIYKKEGEQVEFSPLAFTYBEKLTGSGELMW 240
QY 241 QAERASSKSWITFDLKNKEVSVKRVTOPDKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QAERASSKSWITFDLKNKEVSVKRVTOPDKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKLGQEVNLVVMRATQLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVW 360
DB 301 LEAKTGKLGQEVNLVVMRATQLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPVW 360
QY 361 INPEAGMOCCLSDSGVLLBSNIVKLPWTSTFVPEBKSDKTHTCPPCAPBLLGGPVF 420
DB 361 INPEAGMOCCLSDSGVLLBSNIVKLPWTSTFVPEBKSDKTHTCPPCAPBLLGGPVF 420
QY 421 LFPKPKOTLMTSRPEVTCVVVDVSHEDPEVKFMVYDGVVHNAKTKPREQYNSTYR 480
DB 421 LFPKPKOTLMTSRPEVTCVVVDVSHEDPEVKFMVYDGVVHNAKTKPREQYNSTYR 480
QY 481 VVSVLTIVHQDWLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPOVYTLPPSRDELTKN 540
DB 481 VVSVLTIVHQDWLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPOVYTLPPSRDELTKN 540
QY 541 QVSLTCLLVGFYPSDIAVWESNQPENNYKTTTPVLDSGSEFLLYSKLTVDKSKWQGN 600
DB 541 QVSLTCLLVGFYPSDIAVWESNQPENNYKTTTPVLDSGSEFLLYSKLTVDKSKWQGN 600
QY 601 VFSQSVMEALHNHYTQKSLSLSPG 625
DB 601 VFSQSVMEALHNHYTQKSLSLSPG 625
QY 625 VFSQSVMEALHNHYTQKSLSLSPG 625
DB 625 VFSQSVMEALHNHYTQKSLSLSPG 625
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RESULT 10

US-08-379-516-2
; Sequence 2, Application US/08379516
; Patent No. 6083478
; GENERAL INFORMATION:
; APPLICANT: Allaway, Graham P.
; APPLICANT: Madden, Paul U.
; TITLE OF INVENTION: No. 6083478-*Peptidyl Moiety-Conjugated CD4-Gamma2 and CD4-1gG2*
; TITLE OF INVENTION: Immunconjugates and Uses Thereof
; FILE REFERENCE: 41215-A-PCT-US
; CURRENT APPLICATION NUMBER: US/08/379,516
; CURRENT FILING DATE: 1996-06-10
; EARLIER APPLICATION NUMBER: PCT/US93/07422
; EARLIER FILING DATE: 1993-08-06
; EARLIER APPLICATION NUMBER: 07/927,931
; EARLIER FILING DATE: 1992-08-07
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO: 2
; LENGTH: 432
; TYPE: PRT
; ORGANISM: Homo sapiens
US-08-379-516-2

Query Match 60.8%; Score 2077; DB 3; Length 432;
Best Local Similarity 66.1%; Pred. No. 3.2e-159;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

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QY 1 MNRGVPFRHLILVQLALLPAATGKRVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60
DB 1 MNRGVPFRHLILVQLALLPAATGKRVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60
QY 61 ILNGGSFLLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILNGGSFLLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGITANSPTHLLQGOSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG 180
DB 121 LVFGITANSPTHLLQGOSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG 180
QY 121 LVFGITANSPTHLLQGOSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG 180
DB 121 LVFGITANSPTHLLQGOSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG 180
QY 181 TWCTCTVLONOKKVEFKIDIVVLAFAFKASSIYKKEGEVSEFPLAFVEKLTGSGELMW 240
DB 181 TWCTCTVLONOKKVEFKIDIVVLAFAFKASSIYKKEGEVSEFPLAFVEKLTGSGELMW 240
QY 181 TWCTCTVLONOKKVEFKIDIVVLAFAFKASSIYKKEGEVSEFPLAFVEKLTGSGELMW 240
DB 181 TWCTCTVLONOKKVEFKIDIVVLAFAFKASSIYKKEGEVSEFPLAFVEKLTGSGELMW 240
QY 241 QAEBAASSKSWITFDLKNKEVSVKKEVTQDPKLQMGKKLPLHLTLPLQALPYAGSGNLTLA 300
DB 241 QAEBAASSKSWITFDLKNKEVSVKKEVTQDPKLQMGKKLPLHLTLPLQALPYAGSGNLTLA 300
QY 207 -----
DB 207 -----
QY 361 LNPEAGMWQCLLSDSGOVLLEBSNIKVLPTWSTPVEPKSCDKHTTCCPCAPPELLGSPSVF 420
DB 361 LNPEAGMWQCLLSDSGOVLLEBSNIKVLPTWSTPVEPKSCDKHTTCCPCAPPELLGSPSVF 420
QY 207 -----KCCVE---CPPPARP-VAGPSVF 226
DB 207 -----KCCVE---CPPPARP-VAGPSVF 226
QY 421 LEPKPKDITLMSRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVNAKTRPBEQYNSYR 480
DB 421 LEPKPKDITLMSRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVNAKTRPBEQYNSYR 480
QY 227 LEPKPKDITLMSRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVNAKTRPBEQYNSYR 286
DB 227 LEPKPKDITLMSRTPEVTCVVVDVSHEDPEVKFMWYVDGVEVNAKTRPBEQYNSYR 286
QY 481 VVSUTITVLHOMWLNGEKYCKKSNKALPAPLEKITSKAKGQPREQVYTLTPSRDELTKN 540
DB 481 VVSUTITVLHOMWLNGEKYCKKSNKALPAPLEKITSKAKGQPREQVYTLTPSRDELTKN 540
QY 287 VVSUTITVLHOMWLNGEKYCKKSNKALPAPLEKITSKAKGQPREQVYTLTPSRDELTKN 346
DB 287 VVSUTITVLHOMWLNGEKYCKKSNKALPAPLEKITSKAKGQPREQVYTLTPSRDELTKN 346
QY 541 QVSLTCLVKGAFPSDIAVEMESNGQPENNYKTTTPVLVSDGSFFLYSKLTYDKSMOQGN 600
DB 541 QVSLTCLVKGAFPSDIAVEMESNGQPENNYKTTTPVLVSDGSFFLYSKLTYDKSMOQGN 600
QY 347 QVSLTCLVKGAFPSDIAVEMESNGQPENNYKTTTPVLVSDGSFFLYSKLTYDKSMOQGN 406
DB 347 QVSLTCLVKGAFPSDIAVEMESNGQPENNYKTTTPVLVSDGSFFLYSKLTYDKSMOQGN 406
QY 601 VFSCVMEBALHNHYTOKSLSPG 625
DB 601 VFSCVMEBALHNHYTOKSLSPG 625
QY 407 VFSCVMEBALHNHYTOKSLSPG 431
DB 407 VFSCVMEBALHNHYTOKSLSPG 431
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RESULT 11

US-09-329-916-2
; Sequence 2, Application US/09329916
; Patent No. 617549
; GENERAL INFORMATION:
; APPLICANT: Progenics Pharmaceuticals, Inc.
; APPLICANT: Progenics Pharmaceuticals, Inc.
; TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
; TITLE OF INVENTION: CD4-GAMMA2 AND CD4-19G2 IMMUNOCONJUGATES, AND USES THEREOF
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESS: Cooper & Dunham
; STREET: 30 Rockefeller Plaza
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10112
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.24
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/329,916
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/477,460
; FILING DATE: 07-JUN-1995
; APPLICATION NUMBER: US 07/927,931
; FILING DATE: 07-AUG-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPW/AJM
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 977-9550
; TELEFAX: (212) 977-9809
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 432 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; ORGANISM: homo sapien
; CELL TYPE: lymphocyte
US-09-329-916-2

Query Match 60.8%; Score 2077; DB 3; Length 432;
Best Local Similarity 66.1%; Pred. No. 3.2e-159;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

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QY 1 MNRGVPFRHLILVQLALLPAATGKRVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60
DB 1 MNRGVPFRHLILVQLALLPAATGKRVVLGKGGDTVELTCTASQKSIQPHMKNNOIK 60
QY 61 ILNGGSFLLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILNGGSFLLTKGSPKLNDRADSRSLMDQGNFLLIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGITANSPTHLLQGOSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG 180
DB 121 LVFGITANSPTHLLQGOSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG 180
QY 121 LVFGITANSPTHLLQGOSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG 180
DB 121 LVFGITANSPTHLLQGOSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG 180
QY 181 TWCTCTVLONOKKVEFKIDIVVLAFAFKASSIYKKEGEVSEFPLAFVEKLTGSGELMW 240
DB 181 TWCTCTVLONOKKVEFKIDIVVLAFAFKASSIYKKEGEVSEFPLAFVEKLTGSGELMW 240
QY 181 TWCTCTVLONOKKVEFKIDIVVLAFAFKASSIYKKEGEVSEFPLAFVEKLTGSGELMW 240
DB 181 TWCTCTVLONOKKVEFKIDIVVLAFAFKASSIYKKEGEVSEFPLAFVEKLTGSGELMW 240
QY 241 QAEBAASSKSWITFDLKNKEVSVKKEVTQDPKLQMGKKLPLHLTLPLQALPYAGSGNLTLA 300
DB 241 QAEBAASSKSWITFDLKNKEVSVKKEVTQDPKLQMGKKLPLHLTLPLQALPYAGSGNLTLA 300
QY 207 -----
DB 207 -----
```

```

QY 301 LEAKTGKLGHOEVLVVMRATOLQKNLTCEVMGPTSPKMLSLKENKAQVSKREKPVWV 360
DB 207 ----- 206
QY 361 LNPEAGMOCILSDSGOVLLESNIKVLPTWSTPVBKSCDKTHTPPCPAPELLGGPSVF 420
DB 207 -----KCCVE---CPCCPAP- VAGPSVF 226
QY 421 LFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNNYVVDGVEVHNAKTKPRREQVSTR 480
DB 227 LFPKPKDTLMISRTPEVTCVVVDVSHEDPEVFNNYVDGVEVHNAKTKPRREQVSTR 286
QY 481 VSVSLTVLHODWLNKGEYKCKVSNKGLPAPIEKTISKAKGQPREPQVYTLPPSRDELTKN 540
DB 287 VSVSLTVVHODWLNKGEYKCKVSNKGLPAPIEKTISKAKGQPREPQVYTLPPSRDEMTKN 346
QY 541 QVSLTCLVKGFPYSDIAVESNGQPENNYKTTPEVLDSGFFLYSKLTVDKSRMQQGN 600
DB 347 QVSLTCLVKGFPYSDIAVESNGQPENNYKTTPEVLDSGFFLYSKLTVDKSRMQQGN 406
QY 601 VFSCSVMEHALHNHYTKSLSPG 625
DB 407 VFSCSVMEHALHNHYTKSLSPG 431

```

RESULT 12

US-08-485-372A-2

Sequence 2, Application US/08485372A

Patent No. 6187748

GENERAL INFORMATION:

APPLICANT: Beaudry, Gary A.

APPLICANT: Maddon, Paul J.

TITLE OF INVENTION: CD4-GAMMA2 CD4-IGG2 CHIMERAS

NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESS:

ADDRESSEE: Cooper & Dunham LLP

STREET: 1185 Avenue of the Americas

CITY: New York

STATE: New York

COUNTRY: USA

ZIP: 10036

COMPUTER READABLE FORM:

MEDIUM TYPE: IBM floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.24

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/485,372A

FILING DATE:

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/476,227

FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:

NAME: White, John P.

REGISTRATION NUMBER: 28,678

REFERENCE/DOCKET NUMBER: 37690-II-A

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 278-0400

TELEFAX: (212) 391-0525

TELEX:

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 432 amino acids

TYPE: amino acid

STRANDEDNESS: unknown

TOPOLOGY: unknown

MOLECULE TYPE: protein

ORIGINAL SOURCE:

ORGANISM: homo sapien

CELL TYPE: lymphocyte

US-08-485-372A-2

Query Match 60.8%; Score 2077; DB 3; Length 432;
 Best local Similarity 66.1%; Pred. No. 3,2e-159;
 Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

```

QY 1 NNRGVPFRHLVLVLOLALIPATQGNKYLGGKGTVEITCTASQKSIQFMKNSNQIK 60
DB 1 NNRGVPFRHLVLVLOLALIPATQGNKYLGGKGTVEITCTASQKSIQFMKNSNQIK 60
QY 61 ILGNQGSFLLTKGSPKLNDRADSRRLMPQGNFPLIKNLTEDSDTYICEVDQKEEYVL 120
DB 61 ILGNQGSFLLTKGSPKLNDRADSRRLMPQGNFPLIKNLTEDSDTYICEVDQKEEYVL 120
QY 121 LVFGTLTANSDBTHLQGSLLTTLLESPGSSPSVQCRSPRGKNIQGGAKTLVSQLELDQSG 180
DB 121 LVFGTLTANSDBTHLQGSLLTTLLESPGSSPSVQCRSPRGKNIQGGAKTLVSQLELDQSG 180
QY 181 TWTCTVLQNKQKVEKIDIVLAFOKASSIVYKKEGQVEFSFLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLQNKQKVEKIDIVLAFOKASSIVYKKEGQVEFSFLAFTVEKLTGSGELMW 240
QY 241 QAEBSASSSWITTFPLKKNKEVSKRVTDPKLQMGKLPMLTLPLQALPQYAGSGNLTLIA 300
DB 207 ----- 206
QY 301 LEAKTGKLGHOEVLVVMRATOLQKNLTCEVMGPTSPKMLSLKENKAQVSKREKPVWV 360
DB 207 ----- 206
QY 361 LNPEAGMOCILSDSGOVLLESNIKVLPTWSTPVBKSCDKTHTPPCPAPELLGGPSVF 420
DB 207 -----KCCVE---CPCCPAP- VAGPSVF 226
QY 421 LFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNNYVVDGVEVHNAKTKPRREQVSTR 480
DB 227 LFPKPKDTLMISRTPEVTCVVVDVSHEDPEVFNNYVDGVEVHNAKTKPRREQVSTR 286
QY 481 VSVSLTVLHODWLNKGEYKCKVSNKGLPAPIEKTISKAKGQPREPQVYTLPPSRDELTKN 540
DB 287 VSVSLTVVHODWLNKGEYKCKVSNKGLPAPIEKTISKAKGQPREPQVYTLPPSRDEMTKN 346
QY 541 QVSLTCLVKGFPYSDIAVESNGQPENNYKTTPEVLDSGFFLYSKLTVDKSRMQQGN 600
DB 347 QVSLTCLVKGFPYSDIAVESNGQPENNYKTTPEVLDSGFFLYSKLTVDKSRMQQGN 406
QY 601 VFSCSVMEHALHNHYTKSLSPG 625
DB 407 VFSCSVMEHALHNHYTKSLSPG 431

```

RESULT 13

US-09-409-006A-2

Sequence 2, Application US/09409006A

Patent No. 6342586

GENERAL INFORMATION:

APPLICANT: Progenics Pharmaceuticals, Inc.

TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED

NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESS:

ADDRESSEE: Cooper & Dunham

STREET: 30 Rockefeller Plaza

CITY: New York

STATE: New York

COUNTRY: USA

ZIP: 10112

COMPUTER READABLE FORM:

MEDIUM TYPE: floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.24

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/409,006A

FILING DATE: 29-SEP-1999

CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/927,931
FILING DATE: 07-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPM/AJM
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 977-9550
TELEFAX: (212) 977-9809
TELEX: 422523 COOP UI
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-09-409-006A-2

Query Match 60.8%; Score 2077; DB 4; Length 432;
Best Local Similarity 66.1%; Pred. No. 3,2e-159;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

QY 1 MNRGVPFRHLLVLTQALLPAAATGKRVVLGKKGDTVELTCTASQKKSIOFHMKNSNOIK 60
DB 1 MNRGVPFRHLLVLTQALLPAAATGKRVVLGKKGDTVELTCTASQKKSIOFHMKNSNOIK 60
QY 61 ILNGSGSFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILNGSGSFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLLOQGSITLTLESPPGSSPSVOCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLLOQGSITLTLESPPGSSPSVOCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 121 LVFGLTANSDTHLLOQGSITLTLESPPGSSPSVOCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLLOQGSITLTLESPPGSSPSVOCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVTLQONQKVEFKIDIVLAFQKASSIVYKKEGEOVERSPFLATVEKLTGSGELMW 240
DB 181 TWTCVTLQONQKVEFKIDIVLAFQKASSIVYKKEGEOVERSPFLATVEKLTGSGELMW 240
QY 181 TWTCVTLQONQKVEFKIDIVLAFQKASSIVYKKEGEOVERSPFLATVEKLTGSGELMW 240
DB 181 TWTCVTLQONQKVEFKIDIVLAFQKASSIVYKKEGEOVERSPFLATVEKLTGSGELMW 240
QY 241 QAEBASSSKSWITFDLKNKEVSVKRVTOPDKLQMGKLLPLHLTPQALPOYAGSGNLTIA 300
DB 207 ----- 206
QY 301 LEAKTGKLGHOEVLNVWRATQLOKNLTCEVWGPTSPKLMLSIKLENKAKVSKREKPVWV 360
DB 207 ----- 206
QY 361 LNPEAGMMQCLSDSGQVLEESNIVLPTWSTPVEPKSGCDKHTHTPCPAPBELLGSPSVF 420
DB 207 -----KCCVE---CPCPAPB-VAGSPSVF 226
QY 421 LPPPKDITMISRTPEVTCVVDVSHEDPEYKFMVYDGVENHAKTKPREEOQNSIYR 480
DB 227 LPPPKDITMISRTPEVTCVVDVSHEDPEYKFMVYDGVENHAKTKPREEOQNSIYR 286
QY 481 VVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISAKAGQPREPQVYTLTPPSRDELTKN 540
DB 287 VVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISAKAGQPREPQVYTLTPPSRDELTKN 346
QY 541 QVSLTCLVKGFPSPDIAMWESNGQPENNYKTTTPVLDSDGSPFLYSKLTVDKSGWQGN 600
DB 347 QVSLTCLVKGFPSPDIAMWESNGQPENNYKTTTPVLDSDGSPFLYSKLTVDKSGWQGN 406
QY 601 VFGSGVMHEALHNHTQKSLSPG 625
DB 407 VFGSGVMHEALHNHTQKSLSPG 431

RESULT 14
US-08-484-681-2
Sequence 2, Application US/08484681
Patent No. 6451313
GENERAL INFORMATION:
APPLICANT: Beaudry, Gary A.
APPLICANT: Madden, Paul J.
TITLE OF INVENTION: CD4-GAMMA2 CD4-19G2 CHIMERAS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSER: Cooper & Dunham LLP
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/484,681
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 37690-II-B
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 278-0400
TELEFAX: (212) 391-0525
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-08-484-681-2

Query Match 60.8%; Score 2077; DB 4; Length 432;
Best Local Similarity 66.1%; Pred. No. 3,2e-159;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

QY 1 MNRGVPFRHLLVLTQALLPAAATGKRVVLGKKGDTVELTCTASQKKSIOFHMKNSNOIK 60
DB 1 MNRGVPFRHLLVLTQALLPAAATGKRVVLGKKGDTVELTCTASQKKSIOFHMKNSNOIK 60
QY 61 ILNGSGSFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILNGSGSFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLLOQGSITLTLESPPGSSPSVOCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLLOQGSITLTLESPPGSSPSVOCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 121 LVFGLTANSDTHLLOQGSITLTLESPPGSSPSVOCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLLOQGSITLTLESPPGSSPSVOCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVTLQONQKVEFKIDIVLAFQKASSIVYKKEGEOVERSPFLATVEKLTGSGELMW 240
DB 181 TWTCVTLQONQKVEFKIDIVLAFQKASSIVYKKEGEOVERSPFLATVEKLTGSGELMW 240
QY 241 QAEBASSSKSWITFDLKNKEVSVKRVTOPDKLQMGKLLPLHLTPQALPOYAGSGNLTIA 300
DB 207 ----- 206
QY 301 LEAKTGKLGHOEVLNVWRATQLOKNLTCEVWGPTSPKLMLSIKLENKAKVSKREKPVWV 360
DB 207 ----- 206

QY 361 LNPEAGMOCCLSDSGVLLBSNLIKVLPTWSTFVPEBKSCDKTHTCPCPAPELLGSPSVF 420
DB 207 -----KCCVE---CPCPAP-VA6PSVF 226
QY 421 LPPPKDOLMTLSRPEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTKPREEOYNSTYR 480
DB 227 LPPPKDOLMTLSRPEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTKPREEOYNSTYR 286
QY 481 VVSVLTIVHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 540
DB 287 VVSVLTIVHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 346
QY 541 QVSLTCLVKGFPYPSDIAVEMESNGOPENNYKTTTPVLDSGSEFLYSKLTVDKSRMQQGN 600
DB 347 QVSLTCLVKGFPYPSDIAVEMESNGOPENNYKTTTPVLDSGSEFLYSKLTVDKSRMQQGN 406
QY 601 VFSCSVMEHALNHNTOKSLSLSPG 625
DB 407 VFSCSVMEHALNHNTOKSLSLSPG 431

RESULT 15

PCT-US93-07422-2
Sequence 2, Application PC/TUS9307422
GENERAL INFORMATION:
APPLICANT: Progenice Pharmaceuticals, Inc.
TITLE OF INVENTION: NON-PEPTIDIC MOIETY-CONJUGATED
NUMBER OF INVENTION: CD4-GAMMA2 AND CD4-IGG2 IMMUNOCONJUGATES, AND USES THEREOF
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Cooper & Dunham
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10112
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patent Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/07422
FILING DATE: 19930806
CLASSIFICATION:
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 07/927,931
FILING DATE: 07-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPW/AJM
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 977-9550
TELEFAX: (212) 977-9809
TELEX: 422523 COOP UI
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
PCT-US93-07422-2

QY Query Match 60.8%; Score 2077; DB 5; Length 432;
Best Local Similarity 66.1%; Pred. No. 3.2e-159;
Matches 413; Conservative 11; Mismatches 7; Indels 194; Gaps 3;

QY 1 NMRGVFPRHLLVLTGALLPAAATQGNKVVLGKKGDVTELTCTASQKSIQFHMKNQIX 60

DB 1 NMRGVFPRHLLVLTGALLPAAATQGNKVVLGKKGDVTELTCTASQKSIQFHMKNQIX 60
QY 61 ILNGGSLFTKGPSKLANRADSRRLMDQGNPPLIKKLTIEDSTYICVEVDQKEEYQL 120
DB 61 ILNGGSLFTKGPSKLANRADSRRLMDQGNPPLIKKLTIEDSTYICVEVDQKEEYQL 120
QY 121 LVFGLTANSDDTLTGOSLTTLTLESPPGSSPSVOCRSRGNKIOGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDDTLTGOSLTTLTLESPPGSSPSVOCRSRGNKIOGKTLVSQLELDQSG 180
QY 181 TWCTVLONOKKVEPKIDIVLAFQKASSIYKKEGQVES9PPLAFTVEKLTGSGELMW 240
DB 181 TWCTVLONOKKVEPKIDIVLAFER----- 206
QY 241 QAEKASSKSWITFDLKNKEVSVKRYTODPKLQMGKLPHLTLPOALPOYAGSGNLTLA 300
DB 207 ----- 206
QY 301 LEAKTGKLHGEVNLVMBATOLQKVLTCBVGFTSPKMLSLKLENKEAKVSKREKPVWV 360
DB 207 ----- 206
QY 361 LNPEAGMOCCLSDSGVLLBSNLIKVLPTWSTFVPEBKSCDKTHTCPCPAPELLGSPSVF 420
DB 207 -----KCCVE---CPCPAP-VA6PSVF 226
QY 421 LPPPKDOLMTLSRPEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTKPREEOYNSTYR 480
DB 227 LPPPKDOLMTLSRPEVTCVVVDVSHEDPEVKFNMYVDGVEVNAKTKPREEOYNSTYR 286
QY 481 VVSVLTIVHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 540
DB 287 VVSVLTIVHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKN 346
QY 541 QVSLTCLVKGFPYPSDIAVEMESNGOPENNYKTTTPVLDSGSEFLYSKLTVDKSRMQQGN 600
DB 347 QVSLTCLVKGFPYPSDIAVEMESNGOPENNYKTTTPVLDSGSEFLYSKLTVDKSRMQQGN 406
QY 601 VFSCSVMEHALNHNTOKSLSLSPG 625
DB 407 VFSCSVMEHALNHNTOKSLSLSPG 431

RESULT 16

US-08-417-495-6
Sequence 6, Application US/08417495
Patent No. 5843728
GENERAL INFORMATION:
APPLICANT: Seed, Brian et al.
TITLE OF INVENTION: Redirection of Cellular Immunity by Chimeras
NUMBER OF INVENTION: Receptor
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
OPERATING SYSTEM: IBM PS/2 Model 502 or 55SX
SOFTWARE: WordPerfect (Version 5.0)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/417,495
FILING DATE:
CLASSIFICATION: 435
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US/08/203,866
FILING DATE:
APPLICATION NUMBER: US/07/847,566

```

; FILING DATE:
; APPLICATION NUMBER: 07/665,961
; FILING DATE: March 7, 1991
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Clark, Paul T.
; REGISTRATION NUMBER: 30,162
; REFERENCE/DOCKET NUMBER: 00786/119002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 542-5070
; TELEFAX: (617) 542-8906
; TELETYPE: 200154
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 532 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-417-495-6

```

```

Query March 59.7%; Score 2039; DB 2; Length 532;
Best Local Similarity 99.0%; Pred. No. 5e-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

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QY 1 MNRGVPFRHLLVLTQLALLPAATGKNVVLGKKGDTVELTCTASQKKSIOFHMKNSNQIK 60
DB 1 MNRGVPFRHLLVLTQLALLPAATGKNVVLGKKGDTVELTCTASQKKSIOFHMKNSNQIK 60
QY 61 ILNGSGFLTKGPKSLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILNGSGFLTKGPKSLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLQGGSLTLTLESPPGSSPSVOCRSRPGKNIOGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLQGGSLTLTLESPPGSSPSVOCRSRPGKNIOGKTLVSQLELDQSG 180
QY 181 TWCTCTVLQONKKEFKIDIVLAFQKASSIYKKKEGQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWCTCTVLQONKKEFKIDIVLAFQKASSIYKKKEGQVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSSKSWITFDLNKKEVSVKRVTDPKLQMGKCLPLHLTLPOALPOYAGSGLTLA 300
DB 241 QAERASSSSKSWITFDLNKKEVSVKRVTDPKLQMGKCLPLHLTLPOALPOYAGSGLTLA 300
QY 301 LEAKTGKLEHENVLVNVRATOLQKNTLCEVWGPSTPKLMLSLKENKEAKYSKKEKPYVW 360
DB 301 LEAKTGKLEHENVLVNVRATOLQKNTLCEVWGPSTPKLMLSLKENKEAKYSKKEKPYVW 360
QY 361 LNPEAGMWQCLLSDSGVLLLESNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMWQCLLSDSGVLLLESNIKVLPTWSTPVHADPKLC 401

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RESULT 17
US-08-284-391B-6
; Sequence 6, Application US/08284391B
; Patent No. 5851828
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; APPLICANT: Banapour, Babak
; APPLICANT: Romeo, Charles
; APPLICANT: Kolanus, Waldemar
; TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
; TITLE OF INVENTION: CELLS BY CHIMERIC CD4 RECEPTOR- BEARING CELLS
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESS: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:

```

```

; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/284,391B
; FILING DATE: 02-AUG-1994
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/195,395
; FILING DATE: 14-FEB-1994
; APPLICATION NUMBER: 07/847,566
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/665,961
; FILING DATE: 07-MAR-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Elbing, Karen L
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/247001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
; TELETYPE:
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 532 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-284-391B-6

```

```

Query March 59.7%; Score 2039; DB 2; Length 532;
Best Local Similarity 99.0%; Pred. No. 5e-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

```

```

QY 1 MNRGVPFRHLLVLTQLALLPAATGKNVVLGKKGDTVELTCTASQKKSIOFHMKNSNQIK 60
DB 1 MNRGVPFRHLLVLTQLALLPAATGKNVVLGKKGDTVELTCTASQKKSIOFHMKNSNQIK 60
QY 61 ILNGSGFLTKGPKSLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILNGSGFLTKGPKSLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLQGGSLTLTLESPPGSSPSVOCRSRPGKNIOGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLQGGSLTLTLESPPGSSPSVOCRSRPGKNIOGKTLVSQLELDQSG 180
QY 181 TWCTCTVLQONKKEFKIDIVLAFQKASSIYKKKEGQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWCTCTVLQONKKEFKIDIVLAFQKASSIYKKKEGQVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSSKSWITFDLNKKEVSVKRVTDPKLQMGKCLPLHLTLPOALPOYAGSGLTLA 300
DB 241 QAERASSSSKSWITFDLNKKEVSVKRVTDPKLQMGKCLPLHLTLPOALPOYAGSGLTLA 300
QY 301 LEAKTGKLEHENVLVNVRATOLQKNTLCEVWGPSTPKLMLSLKENKEAKYSKKEKPYVW 360
DB 301 LEAKTGKLEHENVLVNVRATOLQKNTLCEVWGPSTPKLMLSLKENKEAKYSKKEKPYVW 360
QY 361 LNPEAGMWQCLLSDSGVLLLESNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMWQCLLSDSGVLLLESNIKVLPTWSTPVHADPKLC 401

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RESULT 18
US-09-218-950-6
; Sequence 6, Application US/09218950
; Patent No. 6284240
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; APPLICANT: Banapour, Babak
; APPLICANT: Romeo, Charles

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/ APPLICANT: Kolanus, Waldemar
/ TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
/ TITLE OF INVENTION: CELLS BY CHIMERIC CD4 RECEPTOR-BEARING CELLS
/ NUMBER OF SEQUENCES: 53
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Clark & Elbing LLP
/ STREET: 176 Federal Street
/ CITY: Boston
/ STATE: MA
/ COUNTRY: USA
/ ZIP: 02110
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Diskette
/ COMPUTER: IBM Compatible
/ OPERATING SYSTEM: DOS
/ SOFTWARE: FASTSEQ for Windows Version 2.0
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/218,950
/ FILING DATE:
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US/08/284,391
/ FILING DATE: 02-AUG-1994
/ APPLICATION NUMBER: 08/195,395
/ FILING DATE: 14-FEB-1994
/ APPLICATION NUMBER: 07/847,566
/ FILING DATE: 06-MAR-1992
/ APPLICATION NUMBER: 07/665,961
/ FILING DATE: 07-MAR-1991
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Elbing, Karen L.
/ REGISTRATION NUMBER: 35,238
/ REFERENCE/DOCKET NUMBER: 00786/247001
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 617-428-0200
/ TELEFAX: 617-428-7045
/ TELEX:
/ INFORMATION FOR SEQ ID NO: 6:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 532 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-09-218-950-6

Query Match      59.7%; Score 2039; DB 3; Length 532;
Best Local Similarity 99.0%; Pred. No. 5e-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 NNRGVFPRHLLVLDLALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNNOIK 60
DB 1 NNRGVFPRHLLVLDLALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNNOIK 60
QY 61 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDDTHLLOGQSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDDTHLLOGQSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 122 LVFGLTANSDDTHLLOGQSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 122 LVFGLTANSDDTHLLOGQSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNOQKVEFKIDIVLAFQKASSIYKKEGEQVEFSPLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKVEFKIDIVLAFQKASSIYKKEGEQVEFSPLAFVTEKLTGSGELMW 240
QY 241 QAERASSSSKSWITFDLNKKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
DB 241 QAERASSSSKSWITFDLNKKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
QY 301 LEAKTGKLEHGVNLVVMRATQLOKNLTCEVWGPTSPKMLSLTENKEAKVSKREKPVNV 360
DB 301 LEAKTGKLEHGVNLVVMRATQLOKNLTCEVWGPTSPKMLSLTENKEAKVSKREKPVNV 360
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QY 361 LNPEAGMOCCLSDSGOVLLESNIRKVLPTWGPV--EPRKSC 399
DB 361 LNPEAGMOCCLSDSGOVLLESNIRKVLPTWGPVHADPKLC 401

RESULT 19
PCT-US92-01785-6
/ Sequence 6, Application PC/TUS9201785
/ GENERAL INFORMATION:
/ APPLICANT: The General Hospital Corporation
/ TITLE OF INVENTION: Redirection of Cellular Immunity by Receptor
/ NUMBER OF SEQUENCES: 27
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Fish & Richardson
/ STREET: 225 Franklin Street
/ CITY: Boston
/ STATE: MA
/ COUNTRY: USA
/ ZIP: 02110-2804
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
/ COMPUTER: IBM PS/2 Model 502 or 55SX
/ OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
/ SOFTWARE: Wordperfect (Version 5.0)
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: PCT/US92/01785
/ FILING DATE: 19920306
/ CLASSIFICATION: 530
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 07/665,961
/ FILING DATE: March 7, 1991
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Clark, Paul T.
/ REGISTRATION NUMBER: 30,162
/ REFERENCE/DOCKET NUMBER: 00786/119002
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (617) 542-5070
/ TELEFAX: (617) 542-8906
/ TELEX: 200154
/ INFORMATION FOR SEQ ID NO: 6:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 532 amino acids
/ TYPE: AMINO ACID
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ PCT-US92-01785-6

Query Match      59.7%; Score 2039; DB 5; Length 532;
Best Local Similarity 99.0%; Pred. No. 5e-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 NNRGVFPRHLLVLDLALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNNOIK 60
DB 1 NNRGVFPRHLLVLDLALLPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHMKNNOIK 60
QY 61 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
DB 61 ILGNQSFLLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDDTHLLOGQSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDDTHLLOGQSILTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNOQKVEFKIDIVLAFQKASSIYKKEGEQVEFSPLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQNOQKVEFKIDIVLAFQKASSIYKKEGEQVEFSPLAFVTEKLTGSGELMW 240
QY 241 QAERASSSSKSWITFDLNKKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
DB 241 QAERASSSSKSWITFDLNKKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
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QY 301 LEAKTGKHOEVNLYVMRATOLQKNLTCEVWGPTSPKLMSTLKENKAKVSKREKPVW 360
DB 301 LEAKTGKHOEVNLYVMRATOLQKNLTCEVWGPTSPKLMSTLKENKAKVSKREKPVW 360
QY 361 LNPEAGMWOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMWOCCLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401

RESULT 20

PCT-US95-00454-6
Sequence 6, Application PC/TUS9500454
GENERAL INFORMATION:
APPLICANT: Seed, Brian et al.
TITLE OF INVENTION: Targeted Cytolysis of HIV-Infected
TITLE OF INVENTION: Cells by Chimeric CD4 Receptor-
TITLE OF INVENTION: Bearing Cells
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: Wordperfect (Version 5.0)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/00454
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/847,566
FILING DATE: March 6, 1992
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/665,961
FILING DATE: March 7, 1991
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/247001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 532 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
PCT-US95-00454-6

Query Match 59.7%; Score 2039; DB 5; Length 532;

Best Local Similarity 99.0%; Pred. No. 56-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLVLVLTALPAATQGNKVLGKGGDTVELTCTASQKSIQFHMKNSNOIK 60
DB 1 MNRGVPFRHLVLVLTALPAATQGNKVLGKGGDTVELTCTASQKSIQFHMKNSNOIK 60
QY 61 ILNGSGFLTKGSPSLNDRADSRSLMDQGNFPLIKNLKIETSDTYICEVEDQKEVQL 120
DB 61 ILNGSGFLTKGSPSLNDRADSRSLMDQGNFPLIKNLKIETSDTYICEVEDQKEVQL 120
QY 121 LVFGITANSPTHTLLOGSITLTLESPPGSSPSVQCRSPRGKNIQCGKTLVSQLELDNSG 180
DB 121 LVFGITANSPTHTLLOGSITLTLESPPGSSPSVQCRSPRGKNIQCGKTLVSQLELDNSG 180

QY 181 TWCTVLQONKVEFKIDIVLAFQKASSIVYKKEGQVERSPFLAFTVEKLTSGGELMW 240
DB 181 TWCTVLQONKVEFKIDIVLAFQKASSIVYKKEGQVERSPFLAFTVEKLTSGGELMW 240
QY 241 QAEPASSSKSMITFDLKNKEVSVRKVTQDPRLQNGKTLPHLTLPALPOYAGSGLTLA 300
DB 241 QAEPASSSKSMITFDLKNKEVSVRKVTQDPRLQNGKTLPHLTLPALPOYAGSGLTLA 300
QY 301 LEAKTGKHOEVNLYVMRATOLQKNLTCEVWGPTSPKLMSTLKENKAKVSKREKPVW 360
DB 301 LEAKTGKHOEVNLYVMRATOLQKNLTCEVWGPTSPKLMSTLKENKAKVSKREKPVW 360
QY 361 LNPEAGMWOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMWOCCLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401

RESULT 21

US-08-417-495-4
Sequence 4, Application US/08417495
Patent No. 5843728
GENERAL INFORMATION:
APPLICANT: Seed, Brian et al.
TITLE OF INVENTION: Redirection of Cellular Immunity by
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: Wordperfect (Version 5.0)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/417,495
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/203,866
FILING DATE:
APPLICATION NUMBER: US/07/847,566
FILING DATE:
APPLICATION NUMBER: 07/665,961
FILING DATE: March 7, 1991
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/119002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 575 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-417-495-4

Query Match 59.7%; Score 2039; DB 2; Length 575;

Best Local Similarity 99.0%; Pred. No. 56-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLVLVLTALPAATQGNKVLGKGGDTVELTCTASQKSIQFHMKNSNOIK 60
DB 1 MNRGVPFRHLVLVLTALPAATQGNKVLGKGGDTVELTCTASQKSIQFHMKNSNOIK 60

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Db      1 MNRGVPFRLHLVLQALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHMKNSNOIK 60
Qy      61 ILGNQSSPLTKGSPSKLNDPADSRSLMDQGNPPLIKNLKIEDSDTYICEVEDQKEEYOL 120
Db      61 ILGNQSSPLTKGSPSKLNDPADSRSLMDQGNPPLIKNLKIEDSDTYICEVEDQKEEYOL 120
Qy      121 LVFGLTANSDFHLQOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
Db      121 LVFGLTANSDFHLQOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
Qy      181 TWCTVTLQNOKKVEFKIDIVLAFOKASSIYVKEGEGVEFSPFLAFTVEKLTGSGELMW 240
Db      181 TWCTVTLQNOKKVEFKIDIVLAFOKASSIYVKEGEGVEFSPFLAFTVEKLTGSGELMW 240
Qy      241 QAEKSSSSKSWITFDLKNKEVSVKRVTODPKLQMGKPLHLTLPOLPOYAGSGNLTLA 300
Db      241 QAEKSSSSKSWITFDLKNKEVSVKRVTODPKLQMGKPLHLTLPOLPOYAGSGNLTLA 300
Qy      301 LEAKTGKLEHVEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPYV 360
Db      301 LEAKTGKLEHVEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPYV 360
Qy      361 INPEAGMOCCLSDSGVLLSNNIKVLPWTWSTPV--EPKSC 399
Db      361 INPEAGMOCCLSDSGVLLSNNIKVLPWTWSTPVHADPKLC 401

RESULT 22
US-08-284-391B-4
; Sequence 4, Application US/08284391B
; Patent No. 5851828
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; APPLICANT: Banapour, Babak
; APPLICANT: Romeo, Charles
; APPLICANT: Kolanus, Waldemar
; TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
; TITLE OF INVENTION: CELLS BY CHIMERIC CD4 RECEPTOR- BEARING CELLS
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FASTSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/284,391B
; FILING DATE: 02-AUG-1994
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/195,395
; FILING DATE: 14-FEB-1994
; APPLICATION NUMBER: 07/847,566
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/665,961
; FILING DATE: 07-MAR-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Elbing, Karen L
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/247001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
; TELEX:
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 575 amino acids
```

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; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-284-391B-4

Query Match          59.7%; Score 2039; DB 2; Length 575;
Best Local Similarity 99.0%; Pred. No. 5,6e-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

Qy      1 MNRGVPFRLHLVLQALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHMKNSNOIK 60
Db      1 MNRGVPFRLHLVLQALLPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHMKNSNOIK 60
Qy      61 ILGNQSSPLTKGSPSKLNDPADSRSLMDQGNPPLIKNLKIEDSDTYICEVEDQKEEYOL 120
Db      61 ILGNQSSPLTKGSPSKLNDPADSRSLMDQGNPPLIKNLKIEDSDTYICEVEDQKEEYOL 120
Qy      121 LVFGLTANSDFHLQOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
Db      121 LVFGLTANSDFHLQOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
Qy      181 TWCTVTLQNOKKVEFKIDIVLAFOKASSIYVKEGEGVEFSPFLAFTVEKLTGSGELMW 240
Db      181 TWCTVTLQNOKKVEFKIDIVLAFOKASSIYVKEGEGVEFSPFLAFTVEKLTGSGELMW 240
Qy      241 QAEKSSSSKSWITFDLKNKEVSVKRVTODPKLQMGKPLHLTLPOLPOYAGSGNLTLA 300
Db      241 QAEKSSSSKSWITFDLKNKEVSVKRVTODPKLQMGKPLHLTLPOLPOYAGSGNLTLA 300
Qy      301 LEAKTGKLEHVEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPYV 360
Db      301 LEAKTGKLEHVEVNLVVMRATOLQKNLTCEVWGPTSPKMLSLKENKEAKVSKREKPYV 360
Qy      361 INPEAGMOCCLSDSGVLLSNNIKVLPWTWSTPV--EPKSC 399
Db      361 INPEAGMOCCLSDSGVLLSNNIKVLPWTWSTPVHADPKLC 401

RESULT 23
US-09-218-950-4
; Sequence 4, Application US/09218950
; Patent No. 6284240
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; APPLICANT: Banapour, Babak
; APPLICANT: Romeo, Charles
; APPLICANT: Kolanus, Waldemar
; TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
; TITLE OF INVENTION: CELLS BY CHIMERIC CD4 RECEPTOR- BEARING CELLS
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FASTSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/218,950
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/284,391
; FILING DATE: 02-AUG-1994
; APPLICATION NUMBER: 08/195,395
; FILING DATE: 14-FEB-1994
; APPLICATION NUMBER: 07/847,566
```

FILING DATE: 06-MAR-1992
APPLICATION NUMBER: 07/665,961
FILING DATE: 07-MAR-1991
ATTORNEY/AGENT INFORMATION:
NAME: Eibling, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/247001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
TELEX:
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 575 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-218-950-4

Query Match 59.7%; Score 2039; DB 3; Length 575;
Best Local Similarity 99.0%; Pred. No. 5,66-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLVLVQLALPPAATQGNKVLGKKGDTVELTCTASQKSIQPHMKNNOIK 60
DB 1 MNRGVPFRHLVLVQLALPPAATQGNKVLGKKGDTVELTCTASQKSIQPHMKNNOIK 60
QY 61 ILNGSGFLTKGSPKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILNGSGFLTKGSPKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLQGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLQGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVTLQONQKVEFKIDIVLAFQKASSIYKKEGEOVESFPLAFTVEKLTGSGELMW 240
DB 181 TWTCVTLQONQKVEFKIDIVLAFQKASSIYKKEGEOVESFPLAFTVEKLTGSGELMW 240
QY 241 QAEKASSSSKSWITFDLNKKEVSVKRVTDPRLOMGKPLPHLTLPOALPOYAGSGNLTIA 300
DB 241 QAEKASSSSKSWITFDLNKKEVSVKRVTDPRLOMGKPLPHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKLGHOEVNLVYVRATOLQKNLTCCEVWGPTSPKLMSTLKENKAKYSKREKPYW 360
DB 301 LEAKTGKLGHOEVNLVYVRATOLQKNLTCCEVWGPTSPKLMSTLKENKAKYSKREKPYW 360
QY 361 LNPEAGMWQCLLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMWQCLLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401

RESULT 24
PCT-US92-01785-4
Sequence 4, Application PC/TUS9201785

GENERAL INFORMATION:
APPLICANT: The General Hospital Corporation
TITLE OF INVENTION: Redirection of Cellular Immunity by Receptor
TITLE OF INVENTION: Chimeras
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 55SX
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: Wordperfect (Version 5.0)

CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/01785
FILING DATE: 19920306
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/665,961
FILING DATE: March 7, 1991
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/119002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 575 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: protein
PCT-US92-01785-4

Query Match 59.7%; Score 2039; DB 5; Length 575;
Best Local Similarity 99.0%; Pred. No. 5,66-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLVLVQLALPPAATQGNKVLGKKGDTVELTCTASQKSIQPHMKNNOIK 60
DB 1 MNRGVPFRHLVLVQLALPPAATQGNKVLGKKGDTVELTCTASQKSIQPHMKNNOIK 60
QY 61 ILNGSGFLTKGSPKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILNGSGFLTKGSPKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLQGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLQGGSLTTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCVTLQONQKVEFKIDIVLAFQKASSIYKKEGEOVESFPLAFTVEKLTGSGELMW 240
DB 181 TWTCVTLQONQKVEFKIDIVLAFQKASSIYKKEGEOVESFPLAFTVEKLTGSGELMW 240
QY 241 QAEKASSSSKSWITFDLNKKEVSVKRVTDPRLOMGKPLPHLTLPOALPOYAGSGNLTIA 300
DB 241 QAEKASSSSKSWITFDLNKKEVSVKRVTDPRLOMGKPLPHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKLGHOEVNLVYVRATOLQKNLTCCEVWGPTSPKLMSTLKENKAKYSKREKPYW 360
DB 301 LEAKTGKLGHOEVNLVYVRATOLQKNLTCCEVWGPTSPKLMSTLKENKAKYSKREKPYW 360
QY 361 LNPEAGMWQCLLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMWQCLLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401

RESULT 25
PCT-US95-00454-4
Sequence 4, Application PC/TUS9500454

GENERAL INFORMATION:
APPLICANT: Seed, Brian et al.
TITLE OF INVENTION: Targeted Cytolysis of HIV-Infected
TITLE OF INVENTION: Cells by Chimeric CD4 Receptor-
TITLE OF INVENTION: Bearing Cells
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110-2804
COMPUTER READABLE FORM:

```
/ MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
/ COMPUTER: IBM PS/2 Model 502 or 55SX
/ OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
/ SOFTWARE: Wordperfect (Version 5.0)
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: PCT/US95/00454
/ FILING DATE:
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 07/847,566
/ FILING DATE: March 6, 1992
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 07/665,961
/ FILING DATE: March 7, 1991
/ CLASSIFICATION:
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Clark, Paul T.
/ REGISTRATION NUMBER: 30,162
/ REFERENCE/DOCKET NUMBER: 00786/247001
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (617) 542-5070
/ TELEFAX: (617) 542-8906
/ TELETYPE: 200154
/ INFORMATION FOR SEQ ID NO: 4:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 575 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
PCT-US95-00454-4
```

```
Query Match 59.7%; Score 2039; DB 5; Length 575;
Best Local Similarity 99.0%; Pred. No. 5.6e-156;
Matches 397; Conservative 1; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVFPHLLVLTQALLPAATQGNKVLGKGGDTVELTCTASQKKSIOFHKNSNOIK 60
DB 1 MNRGVFPHLLVLTQALLPAATQGNKVLGKGGDTVELTCTASQKKSIOFHKNSNOIK 60
QY 61 ILGNQSPFLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVL 120
DB 61 ILGNQSPFLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVL 120
QY 121 LVFGLTANSDTHLLQGOSLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDTHLLQGOSLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCYVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFVTEKLTSGGELMW 240
DB 181 TWTCYVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFVTEKLTSGGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKLNQEVNLYVMRATQLOKNTCEWGPSPKMLSLKLENKAKVSKREKPVWV 360
DB 301 LEAKTGKLNQEVNLYVMRATQLOKNTCEWGPSPKMLSLKLENKAKVSKREKPVWV 360
QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPKLC 401
```

```
RESULT 26
US-08-466-368-4
; Sequence 4, Application US/08466368
; Patent No. 609539
; GENERAL INFORMATION:
; APPLICANT: Maddon, Paul J.
; APPLICANT: Litman, Dan R.
; APPLICANT: Chess, Leonard
```

```
/ APPLICANT: Axel, Richard
/ APPLICANT: Weiss, Robin
/ APPLICANT: McDougal, J. S.
/ TITLE OF INVENTION: DNA ENCODING THE T CELL SURFACE PROTEIN
/ TITLE OF INVENTION: T4 AND USE OF FRAGMENTS OF T4 IN THE TREATMENT OF AIDS
/ NUMBER OF SEQUENCES: 21
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Cooper & Dunham LLP
/ STREET: 1185 Avenue of Americas
/ CITY: New York
/ STATE: New York
/ COUNTRY: USA
/ ZIP: 10036
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/466,368
/ FILING DATE: 06-JUN-1995
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: White, John P.
/ REGISTRATION NUMBER: 28,678
/ REFERENCE/DOCKET NUMBER: 24577-E1-B/JPW/ACC
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 212-278-0400
/ TELEFAX: 212-391-0525
/ INFORMATION FOR SEQ ID NO: 4:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 458 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
US-08-466-368-4
```

```
Query Match 59.7%; Score 2038; DB 3; Length 458;
Best Local Similarity 99.7%; Pred. No. 4.8e-156;
Matches 395; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MNRGVFPHLLVLTQALLPAATQGNKVLGKGGDTVELTCTASQKKSIOFHKNSNOIK 60
DB 1 MNRGVFPHLLVLTQALLPAATQGNKVLGKGGDTVELTCTASQKKSIOFHKNSNOIK 60
QY 61 ILGNQSPFLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVL 120
DB 61 ILGNQSPFLTKGPSKLNDRADSRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVL 120
QY 121 LVFGLTANSDTHLLQGOSLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDTHLLQGOSLTLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCYVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFVTEKLTSGGELMW 240
DB 181 TWTCYVLQNOQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFVTEKLTSGGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKLNQEVNLYVMRATQLOKNTCEWGPSPKMLSLKLENKAKVSKREKPVWV 360
DB 301 LEAKTGKLNQEVNLYVMRATQLOKNTCEWGPSPKMLSLKLENKAKVSKREKPVWV 360
QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV 396
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV 396
```

```
RESULT 27
US-08-417-495-5
; Sequence 5, Application US/08417495
```

Patent No. 5843728
GENERAL INFORMATION:
APPLICANT: Seed, Brian et al.
TITLE OF INVENTION: Redirection of Cellular Immunity by Chimerae
TITLE OF INVENTION: Receptor
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 55SX
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: Wordperfect (Version 5.0)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/417,495
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/203,866
FILING DATE:
APPLICATION NUMBER: US/07/847,566
FILING DATE:
APPLICATION NUMBER: 07/665,961
FILING DATE: March 7, 1991
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/119002
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 462 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-417-495-5

Query Match 59.6%; Score 2035; DB 2; Length 462;
Best Local Similarity 98.8%; Pred. No. 8.5e-156;
Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLILVQLALLPAAATGKNVVLGKGGDTVELTCTASOKKSIOFHMKNNSNOIK 60
DB 1 MNRGVPFRHLILVQLALLPAAATGKNVVLGKGGDTVELTCTASOKKSIOFHMKNNSNOIK 60
QY 61 ILNGGSEFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILNGGSEFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGITANSPTHLLQGOSLITLLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGITANSPTHLLQGOSLITLLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 121 TWTCVVLNOKKVEFKIDIVLAFQKASSIVYKKEGEQEPSPFLAFVVEKLTGSGELMW 240
DB 121 TWTCVVLNOKKVEFKIDIVLAFQKASSIVYKKEGEQEPSPFLAFVVEKLTGSGELMW 240
QY 241 QAERASSSSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLITLPOALPOYAGSGLTLTA 300
DB 241 QAERASSSSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLITLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKLEHVEVNLVVMRATQLOKULTEVWGPTSPKMLSLKENKAKYSKREKPVW 360
DB 301 LEAKTGKLEHVEVNLVVMRATQLOKULTEVWGPTSPKMLSLKENKAKYSKREKPVW 360

QY 361 LNPEAGMOCCLSDSGVLLSENIKVLPTWSTPV--EPKSC 399
DB 361 LNPEAGMOCCLSDSGVLLSENIKVLPTWSTPVHADPOLC 401

RESULT 28
US-08-284-391B-5
Sequence 5, Application US/08284391B
Patent No. 5851828
GENERAL INFORMATION:
APPLICANT: Seed, Brian
APPLICANT: Banapour, Babak
APPLICANT: Romeo, Charles
APPLICANT: Kolanus, Waldemar
TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
NUMBER OF SEQUENCES: 53
CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elbing LLP
STREET: 176 Federal Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastISO for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/284,391B
FILING DATE: 02-AUG-1994
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/195,395
FILING DATE: 14-FEB-1994
APPLICATION NUMBER: 07/847,566
FILING DATE: 06-MAR-1992
APPLICATION NUMBER: 07/665,961
FILING DATE: 07-MAR-1991
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/247001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
TELEX:
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 462 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-284-391B-5

Query Match 59.6%; Score 2035; DB 2; Length 462;
Best Local Similarity 98.8%; Pred. No. 8.5e-156;
Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLILVQLALLPAAATGKNVVLGKGGDTVELTCTASOKKSIOFHMKNNSNOIK 60
DB 1 MNRGVPFRHLILVQLALLPAAATGKNVVLGKGGDTVELTCTASOKKSIOFHMKNNSNOIK 60
QY 61 ILNGGSEFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILNGGSEFLTKGSPSKLNDRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGITANSPTHLLQGOSLITLLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGITANSPTHLLQGOSLITLLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

QY 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIYVKEGEQVEFSPPLAFTVEXLTGSGELMW 240
|||
DB 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIYVKEGEQVEFSPPLAFTVEXLTGSGELMW 240
QY 241 QAEKASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
|||
DB 241 QAEKASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
QY 301 LEAKTGKXHOEVNLYVMRATQLOKNTLCEVWGPTSPKMLSLKLENKEAKVSKREKPYVW 360
|||
DB 301 LEAKTGKXHOEVNLYVMRATQLOKNTLCEVWGPTSPKMLSLKLENKEAKVSKREKPYVW 360
QY 361 LNPEAGMOCCLISDSGOVLESNIKVLPTWSTPVHADPOLC 401
|||
DB 361 LNPEAGMOCCLISDSGOVLESNIKVLPTWSTPVHADPOLC 401

RESULT 29
US-09-218-950-5
; Sequence 5, Application US/09218950
; Patent No. 6284240
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; APPLICANT: Banapour, Babak
; APPLICANT: Romeo, Charles
; APPLICANT: Kolanus, Waldemar
; TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/218,950
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/284,391
; FILING DATE: 02-AUG-1994
; APPLICATION NUMBER: 08/195,395
; FILING DATE: 14-FEB-1994
; APPLICATION NUMBER: 07/847,566
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/665,961
; FILING DATE: 07-MAR-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Elbing, Karen L.
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/247001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
; TELETYPE:
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 462 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-09-218-950-5

Query Match 59.6%; Score 2035; DB 3; Length 462;

Best Local Similarity 98.8%; Pred. No. 8.5e-156;
Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;
QY 1 NMRGVPFPHLLLVLTALLPAATQGNKVVLGKGPVTELTCTASGSKSIQTHWKNNOIK 60
|||
DB 1 NMRGVPFPHLLLVLTALLPAATQGNKVVLGKGPVTELTCTASGSKSIQTHWKNNOIK 60
QY 61 ILGNQSEFLTKGPSKLNDRASRSLMDQGNFPLIKLKIEDSDTYICEVEDQEEVQL 120
|||
DB 61 ILGNQSEFLTKGPSKLNDRASRSLMDQGNFPLIKLKIEDSDTYICEVEDQEEVQL 120
QY 121 LVFGLTANSDFHLLQGGSLTTLTLESPPGSSPSVQCRSPRGNNIOGKTLVSQLELDQSG 180
|||
DB 121 LVFGLTANSDFHLLQGGSLTTLTLESPPGSSPSVQCRSPRGNNIOGKTLVSQLELDQSG 180
QY 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIYVKEGEQVEFSPPLAFTVEXLTGSGELMW 240
|||
DB 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIYVKEGEQVEFSPPLAFTVEXLTGSGELMW 240
QY 241 QAEKASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
|||
DB 241 QAEKASSSSKSWITFDLKNKEVSVKRVTPDKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
QY 301 LEAKTGKXHOEVNLYVMRATQLOKNTLCEVWGPTSPKMLSLKLENKEAKVSKREKPYVW 360
|||
DB 301 LEAKTGKXHOEVNLYVMRATQLOKNTLCEVWGPTSPKMLSLKLENKEAKVSKREKPYVW 360
QY 361 LNPEAGMOCCLISDSGOVLESNIKVLPTWSTPVHADPOLC 401
|||
DB 361 LNPEAGMOCCLISDSGOVLESNIKVLPTWSTPVHADPOLC 401

RESULT 30
PCT-US92-01785-5
; Sequence 5, Application PC/TUS9201785
; GENERAL INFORMATION:
; APPLICANT: The General Hospital Corporation
; TITLE OF INVENTION: Redirection of Cellular Immunity by Receptor
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; COMPUTER: IBM PS/2 Model 502 or 55SX
; OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
; SOFTWARE: Wordperfect (Version 5.0)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US92/01785
; FILING DATE: 19920306
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/665,961
; FILING DATE: March 7, 1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Clark, Paul T.
; REGISTRATION NUMBER: 30,162
; REFERENCE/DOCKET NUMBER: 00786/119002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 542-5070
; TELEFAX: (617) 542-8906
; TELETYPE:
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 462 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: linear
; MOLECULE TYPE: protein

PCT-US92-01785-5

Query Match 59.6%; Score 2035; DB 5; Length 462;
 Best Local Similarity 98.8%; Pred. No. 8.5e-156;
 Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLIVLQALLPAATQGNKVLGKGGDTVELCTASOKKSIQPHWKNNOIK 60
 DB 1 MNRGVPFRHLIVLQALLPAATQGNKVLGKGGDTVELCTASOKKSIQPHWKNNOIK 60
 QY 61 ILNGSGFLTKGPKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEEVOL 120
 DB 61 ILNGSGFLTKGPKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEEVOL 120
 QY 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWCTVLOKQKVEFKIDIVLAFQKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 240
 DB 181 TWCTVLOKQKVEFKIDIVLAFQKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 240
 QY 241 QAERASSSKSWITFDLKNKEVSVKRVTQDPKLGKGLPLHLTLPOALPYAGSGNLTLA 300
 DB 241 QAERASSSKSWITFDLKNKEVSVKRVTQDPKLGKGLPLHLTLPOALPYAGSGNLTLA 300
 QY 301 LEAKTGKLEHVEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKAKYSKREKPYWV 360
 DB 301 LEAKTGKLEHVEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKAKYSKREKPYWV 360
 QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
 DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPOLC 401

RESULT 31

PCT-US95-00454-5
 ; Sequence 5, Application PC/TUS9500454
 ; GENERAL INFORMATION:

APPLICANT: Seed, Brian et al.
 TITLE OF INVENTION: Targeted Cytolysis of HIV-Infected
 TITLE OF INVENTION: Cells by Chimeric CD4 Receptor-
 TITLE OF INVENTION: Bearing Cells
 NUMBER OF SEQUENCES: 27
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Fish & Richardson
 STREET: 225 Franklin Street
 CITY: Boston
 STATE: MA

COUNTRY: USA
 ZIP: 02110-2804

COMPUTER READABLE FORM:
 MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
 COMPUTER: IBM PS/2 Model 502 or 55SX
 OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
 SOFTWARE: Wordperfect (Version 5.0)
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: PCT/US95/00454
 FILING DATE:

CLASSIFICATION:
 PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/847,566
 FILING DATE: March 6, 1992

CLASSIFICATION:
 PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/665,961
 FILING DATE: March 7, 1991

CLASSIFICATION:
 ATTORNEY/AGENT INFORMATION:

NAME: Clark, Paul T.
 REGISTRATION NUMBER: 30,162

REFERENCE/DOCKET NUMBER: 00786/247001

TELECOMMUNICATION INFORMATION:

TELEPHONE: (617) 542-5070
 TELEFAX: (617) 542-8906

TELEX: 200154

INFORMATION FOR SEQ ID NO: 5:

SEQUENCE CHARACTERISTICS:

LENGTH: 462 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

PCT-US95-00454-5

Query Match 59.6%; Score 2035; DB 5; Length 462;
 Best Local Similarity 98.8%; Pred. No. 8.5e-156;
 Matches 396; Conservative 2; Mismatches 1; Indels 2; Gaps 1;

QY 1 MNRGVPFRHLIVLQALLPAATQGNKVLGKGGDTVELCTASOKKSIQPHWKNNOIK 60
 DB 1 MNRGVPFRHLIVLQALLPAATQGNKVLGKGGDTVELCTASOKKSIQPHWKNNOIK 60
 QY 61 ILNGSGFLTKGPKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEEVOL 120
 DB 61 ILNGSGFLTKGPKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEEVOL 120
 QY 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWCTVLOKQKVEFKIDIVLAFQKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 240
 DB 181 TWCTVLOKQKVEFKIDIVLAFQKASSIYKKEGQVEFSPLAFTVEKLTGSGELMW 240
 QY 241 QAERASSSKSWITFDLKNKEVSVKRVTQDPKLGKGLPLHLTLPOALPYAGSGNLTLA 300
 DB 241 QAERASSSKSWITFDLKNKEVSVKRVTQDPKLGKGLPLHLTLPOALPYAGSGNLTLA 300
 QY 301 LEAKTGKLEHVEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKAKYSKREKPYWV 360
 DB 301 LEAKTGKLEHVEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKENKAKYSKREKPYWV 360
 QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV--EPKSC 399
 DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVHADPOLC 401

RESULT 32

US-08-328-500-9
 ; Sequence 9, Application US/08328500
 ; Patent No. 6673896
 ; GENERAL INFORMATION:

APPLICANT: Maddon, Paul J.
 APPLICANT: Axel, Richard
 APPLICANT: Sweet, Richard W.
 APPLICANT: Athos, James

TITLE OF INVENTION: DERIVATIVES OF SOLUBLE T-4
 NUMBER OF SEQUENCES: 22
 CORRESPONDENCE ADDRESS:

ADDRESSEE: Cooper & Dunham
 STREET: 1185 Avenue of the Americas
 CITY: New York
 STATE: New York

COUNTRY: U.S.A.
 ZIP: 10036

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent in Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/328,500
 FILING DATE:

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: White, John P.

```

;
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 0575/24577-CY
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 278-0400
; TELEFAX: (212) 391-0525
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 457 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
;
US-08-328-500-9

```

```

Query Match          59.5%; Score 2030; DB 4; Length 457;
Best Local Similarity 99.5%; Pred. No. 2,1e-155;
Matches 394; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```

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QY 1 NMRGVFPRHLLVQLALLPAATQGNKVVLGKKGDVETLTASQKKSIOFHWKNSNOIK 60
DB 1 NMRGVFPRHLLVQLALLPAATQGNKVVLGKKGDVETLTASQKKSIOFHWKNSNOIK 60
QY 61 IINGGSEFLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
DB 61 IINGGSEFLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDTHLLOQOSLTLTLESPPGSSPSVQCRSPRGKNIOGKTLVSQLELODSG 180
DB 121 LVFGLTANSDTHLLOQOSLTLTLESPPGSSPSVQCRSPRGKNIOGKTLVSQLELODSG 180
QY 181 TWTCTVLQONQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQONQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 300
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKLEHDEVNLVVMRATOLQKLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWV 360
DB 301 LEAKTGKLEHDEVNLVVMRATOLQKLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWV 360
QY 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPVP 396
DB 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPVP 396

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RESULT 33
US-08-284-391B-29
; Sequence 29, Application US/08284391B
; Patent No. 5851828
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; APPLICANT: Banapour, Babak
; APPLICANT: Romeo, Charles
; APPLICANT: Kolanus, Waldemar
; TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
; TITLE OF INVENTION: CELLS BY CHIMERIC CD4 RECEPTOR- BEARING CELLS
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FASTSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/284,391B
; FILING DATE: 02-AUG-1994
;

```

```

;
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/195,395
; FILING DATE: 14-FEB-1994
; APPLICATION NUMBER: 07/847,566
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/665,961
; FILING DATE: 07-MAR-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Elbing, Karen L
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/247001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
;
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 398 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
;
US-08-284-391B-29

```

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Query Match          59.4%; Score 2029; DB 2; Length 398;
Best Local Similarity 100.0%; Pred. No. 2,1e-155;
Matches 394; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1 NMRGVFPRHLLVQLALLPAATQGNKVVLGKKGDVETLTASQKKSIOFHWKNSNOIK 60
DB 1 NMRGVFPRHLLVQLALLPAATQGNKVVLGKKGDVETLTASQKKSIOFHWKNSNOIK 60
QY 61 IINGGSEFLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
DB 61 IINGGSEFLTKGPSKLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYQL 120
QY 121 LVFGLTANSDTHLLOQOSLTLTLESPPGSSPSVQCRSPRGKNIOGKTLVSQLELODSG 180
DB 121 LVFGLTANSDTHLLOQOSLTLTLESPPGSSPSVQCRSPRGKNIOGKTLVSQLELODSG 180
QY 181 TWTCTVLQONQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
DB 181 TWTCTVLQONQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSPFLAFVTEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 300
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKLEHDEVNLVVMRATOLQKLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWV 360
DB 301 LEAKTGKLEHDEVNLVVMRATOLQKLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWV 360
QY 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPVP 394
DB 361 LNPEAGMOCCLSDSGVLLSNIKVLPTWSTPVP 394

```

```

RESULT 34
US-09-218-950-29
; Sequence 29, Application US/09218950
; Patent No. 6284240
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; APPLICANT: Banapour, Babak
; APPLICANT: Romeo, Charles
; APPLICANT: Kolanus, Waldemar
; TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
; TITLE OF INVENTION: CELLS BY CHIMERIC CD4 RECEPTOR- BEARING CELLS
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
;

```

```
/ CITY: Boston
/ STATE: MA
/ COUNTRY: USA
/ ZIP: 02110
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Diskette
/ OPERATING SYSTEM: DOS
/ SOFTWARE: FASTSEQ for Windows Version 2.0
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/218,950
/ FILING DATE:
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US/08/284,391
/ FILING DATE: 02-AUG-1994
/ APPLICATION NUMBER: 08/195,395
/ FILING DATE: 14-FEB-1994
/ APPLICATION NUMBER: 07/847,566
/ FILING DATE: 06-MAR-1992
/ APPLICATION NUMBER: 07/665,961
/ FILING DATE: 07-MAR-1991
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Eiding, Karen L
/ REGISTRATION NUMBER: 35,238
/ REFERENCE/DOCKET NUMBER: 00786/247001
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 617-428-0200
/ TELEFAX: 617-428-7045
/ TELEX:
/ INFORMATION FOR SEQ ID NO: 29:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 398 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-09-218-950-29

Query Match      59.4%; Score 2029; DB 3; Length 398;
Best Local Similarity 100.0%; Pred. No. 2.1e-155;
Matches 394; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MNRGVPFRHLVLVQLALPAPATQGNKVVLAGKGDVLELTCTASQKSIQPHMKNNSQIK 60
DB 1 MNRGVPFRHLVLVQLALPAPATQGNKVVLAGKGDVLELTCTASQKSIQPHMKNNSQIK 60
QY 61 ILNGSGFLTKGPKSLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILNGSGFLTKGPKSLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDTHLQGGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG 180
DB 121 LVFGLTANSDTHLQGGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG 180
QY 181 TWTCVTLOQNKKEFKIDIVLAFQKASSIYVKKGEQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWTCVTLOQNKKEFKIDIVLAFQKASSIYVKKGEQVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAEKASSKSWITFDLKNKEVSVKRVTDPKLQMGKPLHLTLPOALPOYAGSGNLTIA 300
DB 241 QAEKASSKSWITFDLKNKEVSVKRVTDPKLQMGKPLHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKHOEVNLVVMRATQLOKNLTCEVWGPTSPKLMLSLKENKEAKVSKREKPYVW 360
DB 301 LEAKTGKHOEVNLVVMRATQLOKNLTCEVWGPTSPKLMLSLKENKEAKVSKREKPYVW 360
QY 361 LNPEAGMWQCLSDSGOVLLESNIVLPTWSTPV 394
DB 361 LNPEAGMWQCLSDSGOVLLESNIVLPTWSTPV 394

RESULT 35
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US-09-039-555B-15
/ Sequence 15, Application US/09039555B
/ Patent No. 6033856
/ GENERAL INFORMATION:
/ APPLICANT: Koerner, Kathrin
/ APPLICANT: Mueller, Rolf
/ APPLICANT: Sadiacek, Hans-Harald
/ TITLE OF INVENTION: PROMOTER OF THE CDC25B GENE, ITS
/ NUMBER OF INVENTION: PREPARATION AND USE
/ NUMBER OF SEQUENCES: 19
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Foley & Lardner
/ STREET: 3000 K Street, N.W., Suite 500
/ CITY: Washington
/ STATE: D.C.
/ COUNTRY: USA
/ ZIP: 20007-5109
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/039,555B
/ FILING DATE: 16-MAR-1998
/ CLASSIFICATION: 514
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: DE 19710643.9
/ FILING DATE: 14-MAR-1997
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Bent, Stephen A.
/ REGISTRATION NUMBER: 29,768
/ REFERENCE/DOCKET NUMBER: 016779/0131
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (202) 672-5300
/ TELEFAX: (202) 672-5399
/ TELEX: 904136
/ INFORMATION FOR SEQ ID NO: 15:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 458 amino acids
/ TYPE: amino acid
/ STRANDEDNESS:
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-09-039-555B-15

Query Match      59.3%; Score 2024; DB 3; Length 458;
Best Local Similarity 99.2%; Pred. No. 6.4e-155;
Matches 393; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 MNRGVPFRHLVLVQLALPAPATQGNKVVLAGKGDVLELTCTASQKSIQPHMKNNSQIK 60
DB 1 MNRGVPFRHLVLVQLALPAPATQGNKVVLAGKGDVLELTCTASQKSIQPHMKNNSQIK 60
QY 61 ILNGSGFLTKGPKSLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILNGSGFLTKGPKSLNDRADSRSLMDQGNFPLIIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDTHLQGGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG 180
DB 121 LVFGLTANSDTHLQGGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDG 180
QY 181 TWTCVTLOQNKKEFKIDIVLAFQKASSIYVKKGEQVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWTCVTLOQNKKEFKIDIVLAFQKASSIYVKKGEQVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAEKASSKSWITFDLKNKEVSVKRVTDPKLQMGKPLHLTLPOALPOYAGSGNLTIA 300
DB 241 QAEKASSKSWITFDLKNKEVSVKRVTDPKLQMGKPLHLTLPOALPOYAGSGNLTIA 300
QY 301 LEAKTGKHOEVNLVVMRATQLOKNLTCEVWGPTSPKLMLSLKENKEAKVSKREKPYVW 360
DB 301 LEAKTGKHOEVNLVVMRATQLOKNLTCEVWGPTSPKLMLSLKENKEAKVSKREKPYVW 360
```

QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEP 396
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPVEP 396

RESULT 36
US-08-236-311-1
Sequence 1, Application US/08236311
Patent No. 5565335
GENERAL INFORMATION:
APPLICANT: Capon, Daniel J.
APPLICANT: Gregory, Timothy J.
TITLE OF INVENTION: Adhesion Variants
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/236,311
FILING DATE: 02-MAY-1994
CLASSIFICATION: 435
PRIOR APPLICATION NUMBER:
APPLICATION NUMBER: 07/936190
FILING DATE: 26-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/842777
FILING DATE: 18-FEB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/250785
FILING DATE: 28-SEP-1988
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/104329
FILING DATE: 02-OCT-1987
ATTORNEY/AGENT INFORMATION:
NAME: Hasek, Janet E.
REGISTRATION NUMBER: 28,616
REFERENCE/DOCKET NUMBER: 444P1C2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-1896
TELEFAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 402 amino acids
TYPE: amino acid
TOPOLOGY: linear
US-08-236-311-1

Query Match 59.1%; Score 2017; DB 1; Length 402;
Best Local Similarity 99.7%; Pred. No. 2e-154;
Matches 392; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 NMRGVPFRLLLVQLALPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHWKSNQIK 60
DB 1 NMRGVPFRLLLVQLALPAATQGNKVVLGKKGDVVELTCTASQKKSIOFHWKSNQIK 60
QY 61 IIGNGSFLTKGSPSKUNDRADSRRLMDQGNPFLIIXNKIKEDSDTYICEVEQKEEVQL 120
DB 61 IIGNGSFLTKGSPSKUNDRADSRRLMDQGNPFLIIXNKIKEDSDTYICEVEQKEEVQL 120
QY 121 LVFGLTANSDBTHLQOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDBTHLQOGSLTLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180

QY 181 TWCTVLONOKKVEEKIDIVLAFQKASSIYKKEGEVESPFLAFTVEKLTGSGBLMW 240
DB 181 TWCTVLONOKKVEEKIDIVLAFQKASSIYKKEGEVESPFLAFTVEKLTGSGBLMW 240
QY 241 QAERASSSKSWITTFDLKNKEVSVKRVTODPKLQMGKULPLHLTLPOALPOYAGSGLTLTA 300
DB 241 QAERASSSKSWITTFDLKNKEVSVKRVTODPKLQMGKULPLHLTLPOALPOYAGSGLTLTA 300
QY 301 LEAKTGKLEHVEVNLVYMRATQLOKMLTCEWGPISPKMLSLKLENKAKYSKREKPVW 360
DB 301 LEAKTGKLEHVEVNLVYMRATQLOKMLTCEWGPISPKMLSLKLENKAKYSKREKPVW 360
QY 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTP 393
DB 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTP 393

RESULT 37
US-08-457-918-1
Sequence 1, Application US/08457918
Patent No. 6117655
GENERAL INFORMATION:
APPLICANT: Capon, Daniel J.
APPLICANT: Gregory, Timothy J.
TITLE OF INVENTION: Adhesion Variants
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/457,918
FILING DATE: 1-JUN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/236311
FILING DATE: 02-MAY-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/936190
FILING DATE: 26-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/842777
FILING DATE: 18-FEB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/250785
FILING DATE: 28-SEP-1988
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/104329
FILING DATE: 02-OCT-1987
ATTORNEY/AGENT INFORMATION:
NAME: Kubinec, Jeffrey S.
REGISTRATION NUMBER: 36,575
REFERENCE/DOCKET NUMBER: P0444P1C3
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-8228
TELEFAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 402 amino acids
TYPE: amino acid
TOPOLOGY: linear
US-08-457-918-1

Query Match. 59.1%; Score 2017; DB 3; Length 402;
 Best Local Similarity 99.7%; Pred. No. 2e-154;
 Matches 392; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 1 MNRGVPFRHLLIVLQALLPATQGNKVLGKGGDTVELTCTASQKSIQPHMKNNSQIK 60
DB 1 MNRGVPFRHLLIVLQALLPATQGNKVLGKGGDTVELTCTASQKSIQPHMKNNSQIK 60
QY 61 ILNGSGSLTGTGPKSLNDRADSRRLMDQGNPFLIKKLTEDSTYICVVDQKEEVOL 120
DB 61 ILNGSGSLTGTGPKSLNDRADSRRLMDQGNPFLIKKLTEDSTYICVVDQKEEVOL 120
QY 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPVOCRSRPGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPVOCRSRPGKNIQGGKTLVSQLELDQSG 180
QY 181 TWCTVTLONOKKVEFKIDIVLAFQKASSIVYKKEGQEVESFPPLAFVTEKLTSGGELMW 240
DB 181 TWCTVTLONOKKVEFKIDIVLAFQKASSIVYKKEGQEVESFPPLAFVTEKLTSGGELMW 240
QY 241 QAERASSKSMITPDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
DB 241 QAERASSKSMITPDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
QY 301 LEAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKEAKVSKKEKPYVW 360
DB 301 LEAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKEAKVSKKEKPYVW 360
QY 361 LNPEAGMWOCCLSDSGVLLBSNITVLPWTSTP 393
DB 361 LNPEAGMWOCCLSDSGVLLBSNITVLPWTSTP 393

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RESULT 38

US-09-517-605-3
 ; Sequence 3, Application US/09517605
 ; Patent No. 6391567
 ; GENERAL INFORMATION:
 ; APPLICANT: Littman, Dan R.
 ; APPLICANT: Kwon, Douglas S.
 ; APPLICANT: van Kooyk, Yvette
 ; APPLICANT: Gellenebeck, Theo
 ; TITLE OF INVENTION: METHODS OF USING A FACILITATOR OF RETROVIRAL ENTRY INTO
 ; FILE REFERENCE: 1049-1-017
 ; CURRENT APPLICATION NUMBER: US/09/517,605
 ; CURRENT FILING DATE: 2000-03-02
 ; NUMBER OF SEQ ID NOS: 17
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 3
 ; LENGTH: 458
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-09-517-605-3

Query Match. 59.1%; Score 2016; DB 4; Length 458;
 Best Local Similarity 99.0%; Pred. No. 2.8e-154;
 Matches 392; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

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QY 1 MNRGVPFRHLLIVLQALLPATQGNKVLGKGGDTVELTCTASQKSIQPHMKNNSQIK 60
DB 1 MNRGVPFRHLLIVLQALLPATQGNKVLGKGGDTVELTCTASQKSIQPHMKNNSQIK 60
QY 61 ILNGSGSLTGTGPKSLNDRADSRRLMDQGNPFLIKKLTEDSTYICVVDQKEEVOL 120
DB 61 ILNGSGSLTGTGPKSLNDRADSRRLMDQGNPFLIKKLTEDSTYICVVDQKEEVOL 120
QY 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPVOCRSRPGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPVOCRSRPGKNIQGGKTLVSQLELDQSG 180
QY 181 TWCTVTLONOKKVEFKIDIVLAFQKASSIVYKKEGQEVESFPPLAFVTEKLTSGGELMW 240
DB 181 TWCTVTLONOKKVEFKIDIVLAFQKASSIVYKKEGQEVESFPPLAFVTEKLTSGGELMW 240

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DB 181 TWCTVTLONOKKVEFKIDIVLAFQKASSIVYKKEGQEVESFPPLAFVTEKLTSGGELMW 240
QY 241 QAERASSKSMITPDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
DB 241 QAERASSKSMITPDLKNKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLA 300
QY 301 LEAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKEAKVSKKEKPYVW 360
DB 301 LEAKTGKLGHOEVNLVVMRATQLOKNLTCEVWGPTSPKMLSLKLENKEAKVSKKEKPYVW 360
QY 361 LNPEAGMWOCCLSDSGVLLBSNITVLPWTSTP 396
DB 361 LNPEAGMWOCCLSDSGVLLBSNITVLPWTSTP 396

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RESULT 39

US-08-466-368-2
 ; Sequence 2, Application US/08466368
 ; Patent No. 6093539
 ; GENERAL INFORMATION:
 ; APPLICANT: Maddon, Paul J.
 ; APPLICANT: Littman, Dan R.
 ; APPLICANT: Chess, Leonard
 ; APPLICANT: Axel, Richard
 ; APPLICANT: Weiss, Robin
 ; APPLICANT: McDougal, J. S.
 ; TITLE OF INVENTION: DNA ENCODING THE T CELL SURFACE PROTEIN
 ; TITLE OF INVENTION: T4 AND USE OF FRAGMENTS OF T4 IN THE TREATMENT OF AIDS
 ; NUMBER OF SEQUENCES: 21
 ; CORRESPONDENCE ADDRESSES:
 ; ADDRESSEE: Cooper & Dunham LLP
 ; STREET: 1185 Avenue of Americas
 ; CITY: New York
 ; STATE: New York
 ; COUNTRY: USA
 ; ZIP: 10036
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/466,368
 ; FILING DATE: 06-JUN-1995
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: White, John P.
 ; REGISTRATION NUMBER: 28,678
 ; REFERENCE/DOCKET NUMBER: 24577-EI-B/JPW/AKC
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 212-278-0400
 ; TELEFAX: 212-391-0525
 ; INFORMATION FOR SEQ ID NO: 2:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 394 amino acids
 ; TYPE: amino acid
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 ; US-08-466-368-2

Query Match. 58.6%; Score 2001; DB 3; Length 394;
 Best Local Similarity 98.7%; Pred. No. 3.7e-153;
 Matches 389; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

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QY 1 MNRGVPFRHLLIVLQALLPATQGNKVLGKGGDTVELTCTASQKSIQPHMKNNSQIK 60
DB 1 MNRGVPFRHLLIVLQALLPATQGNKVLGKGGDTVELTCTASQKSIQPHMKNNSQIK 60
QY 61 ILNGSGSLTGTGPKSLNDRADSRRLMDQGNPFLIKKLTEDSTYICVVDQKEEVOL 120
DB 61 ILNGSGSLTGTGPKSLNDRADSRRLMDQGNPFLIKKLTEDSTYICVVDQKEEVOL 120
QY 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPVOCRSRPGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSPTHLLQGOSLTLTLESPPGSSPVOCRSRPGKNIQGGKTLVSQLELDQSG 180

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Db 121 LVFGLTANSDBTHLLOGOSITLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Qy 181 TWCTCTVLQNOQKVEFKIDIVLVAFOKASSIYVKKEGOVEFSFPLAFTVEKLTGSGELMW 240
Db 181 TWCTCTVLQNOQKVEFKIDIVLVAFOKASSIYVKKEGOVDFFSPLAFTVEKLTGSGELMW 240
Qy 241 QAERASSSKSWITTFDLKXKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOVAGSGLTLA 300
Db 241 QAERASSSKSWITTFDLKXKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOVAGSGLTLA 300
Qy 301 LEAKTGKGLHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKAQVSKREKPVV 360
Db 301 LEAKTGKGLHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKAQVSKREKAVV 360
Qy 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV 394
Db 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV 394
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RESULT 40

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US-08-328-500-2
; Sequence 2, Application US/08328500
; Patent No. 6673896
; GENERAL INFORMATION:
; APPLICANT: Maddon, Paul J.
; APPLICANT: Axel, Richard W.
; APPLICANT: Sweet, Richard W.
; APPLICANT: Arthoe, James
; TITLE OF INVENTION: DERIVATIVES OF SOLUBLE T-4
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham
; STREET: 1185 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/328,500
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 0575/24577-CY
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 278-0400
; TELEFAX: (212) 391-0525
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 394 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-328-500-2
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Query Match 58.6%; Score 2001; DB 4; Length 394;
Best Local Similarity 98.7%; Pred. No. 3, 7e-153;
Matches 389; Conservative 2; Mismatches 3; Indels 0; Gaps 0;
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Qy 1 MNRGVFPHLLVLQALLPAAATQGNKVLGKKGTVELTCTASQKKSIOFHMKNSNOIK 60
Db 1 MNRGVFPHLLVLQALLPAAATQGNKVLGKKGTVELTCTASQKKSIOFHMKNSNOIK 60
Qy 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLITIKNLKIEDSDTYICEVEDQKEEYOL 120
Db 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLITIKNLKIEDSDTYICEVEDQKEEYOL 120
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Qy 121 LVFGLTANSDBTHLLOGOSITLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Db 121 LVFGLTANSDBTHLLOGOSITLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Qy 181 TWCTCTVLQNOQKVEFKIDIVLVAFOKASSIYVKKEGOVEFSFPLAFTVEKLTGSGELMW 240
Db 181 TWCTCTVLQNOQKVEFKIDIVLVAFOKASSIYVKKEGOVDFFSPLAFTVEKLTGSGELMW 240
Qy 241 QAERASSSKSWITTFDLKXKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOVAGSGLTLA 300
Db 241 QAERASSSKSWITTFDLKXKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOVAGSGLTLA 300
Qy 301 LEAKTGKGLHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKAQVSKREKPVV 360
Db 301 LEAKTGKGLHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKAQVSKREKAVV 360
Qy 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV 394
Db 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV 394
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RESULT 41

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5223394-7
; Patent No. 5223394
; APPLICANT: WALLNER, BARBARA
; TITLE OF INVENTION: RECOMBINANT DNA MOLECULE COMPRISING
; LYMPHOCYTE FUNCTION-ASSOCIATED ANTIGEN 3 PHOSPHATIDYLINOSITOL
; LINKAGE SIGNAL SEQUENCE
; NUMBER OF SEQUENCES: 12
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/335,688
; FILING DATE: 10-APR-1989
; SEQ ID NO: 7;
; LENGTH: 458
5223394-7
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Query Match 58.5%; Score 1998; DB 6; Length 458;
Best Local Similarity 98.2%; Pred. No. 8e-153;
Matches 389; Conservative 1; Mismatches 6; Indels 0; Gaps 0;
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Qy 1 MNRGVFPHLLVLQALLPAAATQGNKVLGKKGTVELTCTASQKKSIOFHMKNSNOIK 60
Db 1 MNRGVFPHLLVLQALLPAAATQGNKVLGKKGTVELTCTASQKKSIOFHMKNSNOIK 60
Qy 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLITIKNLKIEDSDTYICEVEDQKEEYOL 120
Db 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLITIKNLKIEDSDTYICEVEDQKEEYOL 120
Qy 121 LVFGLTANSDBTHLLOGOSITLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Db 121 LVFGLTANSDBTHLLOGOSITLTLESPPGSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
Qy 181 TWCTCTVLQNOQKVEFKIDIVLVAFOKASSIYVKKEGOVEFSFPLAFTVEKLTGSGELMW 240
Db 181 TWCTCTVLQNOQKVEFKIDIVLVAFOKASSIYVKKEGOVDFFSPLAFTVEKLTGSGELMW 240
Qy 241 QAERASSSKSWITTFDLKXKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOVAGSGLTLA 300
Db 241 QAERASSSKSWITTFDLKXKEVSVKRVTDPKLQMGKKLPLHLTLPOALPOVAGSGLTLA 300
Qy 301 LEAKTGKGLHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKAQVSKREKPVV 360
Db 301 LEAKTGKGLHOEVNLYVMRATOLQKNLTCEVWGPTSPKMLSLKENKAQVSKREKAVV 360
Qy 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV 396
Db 361 LNPEAGMOCCLSDSGOVLLESNIKVLPTWSTPV 396
```

```
RESULT 42
5223418-2
; Patent No. 5223418
```

```
APPLICANT: ARCURI, EDWARD J., BRANNER, MARY E., DONOVAN, MARY
J., GERBER, ROBERT G., KELLER, JOHN A.
TITLE OF INVENTION: METHOD OF IMPROVING THE YIELD OF
HETEROLOGOUS PROTEINS PRODUCED BY STREPTOMYCES LIVIDANS
NUMBER OF SEQUENCES: 2
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/589,979
FILING DATE: 28-SEP-1990
SEQ ID NO: 2
LENGTH: 394
5223418-2

Query Match      57.1%; Score 1951; DB 6; Length 394;
Best Local Similarity 97.5%; Pred. No. 4e-149;
Matches 384; Conservative 0; Mismatches 10; Indels 0; Gaps 0;

QY 1 MNRGVPFPHLLVLTALLPATQGNKVILGKGGDTVELTCTASQKSIQPHMKNNSQIK 60
DB 1 MNRGVPFPHLLVLTALLPATQGNKVILGKGGDTVELTCTASQKSIQPHMKNNSQIK 60
QY 61 ILNGSGFLLTKGPSKLNDRADSRRLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVQL 120
DB 61 ILNGSGFLLTKGPSKLNDRADSRRLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVQL 120
QY 121 LVFGLTANSDFHLLOGQSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDFHLLOGQSITLTLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLONQKKVEKIDIVLAFOKASSIVYKKEGEQVEPSFLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLONQKKVEKIDIVLAFOKASSIVYKKEGEQVEPSFLAFTVEKLTGSGELMW 240
QY 241 QAERASSKSWITTFPLKNKEVSVKRVTODPKLQMGKPLHLTLTLPOLPOYAGSGNLTILA 300
DB 241 QAERASSKSWITTFPLKNKEVSVKRVTODPKLQMGKPLHLTLTLPOLPOYAGSGNLTILA 300
QY 301 LEAKTGKLGHOEVNLVWMRATOLQKNLTCEVWGPTSPKMLSLKENKEAVSKREKPYWV 360
DB 301 LGAKTGKLGHOEVNLVWMRATOLQKNLTCEVWGPTSPKMLSLKENKEAVSKREKAVNV 360
QY 361 LNPEAGMOCILSDSGVLLSENIIVLPTWSTPV 394
DB 361 KNPEAGMOCILSDSGVLLSENIIVLPTWSTPV 394

RESULT 43
US-08-236-311-4
Sequence 4, Application US/08236311
GENERAL INFORMATION:
APPLICANT: Capon, Daniel J.
APPLICANT: Gregory, Timothy J.
TITLE OF INVENTION: Adhesion Variants
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: patin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/236,311
FILING DATE: 02-MAY-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/936190
FILING DATE: 26-AUG-1992
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/842777
FILING DATE: 18-FEB-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/250785
FILING DATE: 28-SEP-1988
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/104329
FILING DATE: 02-OCT-1987
ATTORNEY/AGENT INFORMATION:
NAME: Hasak, Janet E.
REGISTRATION NUMBER: 28,616
REFERENCE/DOCKET NUMBER: 444PIC2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-1896
TELEFAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 434 amino acids
TYPE: amino acid
TOPOLOGY: linear
US-08-236-311-4

Query Match      55.8%; Score 1904; DB 1; Length 434;
Best Local Similarity 99.7%; Pred. No. 2.8e-145;
Matches 369; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 24 QGNRVILGKGGDTVELTCTASQKSIQPHMKNNSQIKILNGSGFLLTKGPSKLNDRADSR 83
DB 56 QGNRVILGKGGDTVELTCTASQKSIQPHMKNNSQIKILNGSGFLLTKGPSKLNDRADSR 115
QY 84 RSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVQLLVFGLTANSDFHLLOGQSITLT 143
DB 116 RSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVQLLVFGLTANSDFHLLOGQSITLT 175
QY 144 ESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLONQKVEFKIDIVLA 203
DB 176 ESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWTCTVLONQKVEFKIDIVLA 235
QY 204 FOKASSIVYKKEGEQVEPSFLAFTVEKLTGSGELMWQAEASSKSWITTFDLKNKEVS 263
DB 236 FOKASSIVYKKEGEQVEPSFLAFTVEKLTGSGELMWQAEASSKSWITTFDLKNKEVS 295
QY 264 KRVTDPKLQMGKPLHLTLTLPOLPOYAGSGNLTILAFAKTLGKLGHOEVNLVWMRATOLQ 323
DB 296 KRVTDPKLQMGKPLHLTLTLPOLPOYAGSGNLTILAFAKTLGKLGHOEVNLVWMRATOLQ 355
QY 324 KNLTCEVWGPTSPKMLSLKENKEAVSKREKPYWVNLNPEAGMOCILSDSGVLLSE 383
DB 356 KNLTCEVWGPTSPKMLSLKENKEAVSKREKPYWVNLNPEAGMOCILSDSGVLLSE 415
QY 384 IKVLPTWSTP 393
DB 416 IKVLPTWSTP 425

RESULT 44
US-08-457-918-4
Sequence 4, Application US/08457918
GENERAL INFORMATION:
APPLICANT: Capon, Daniel J.
APPLICANT: Gregory, Timothy J.
TITLE OF INVENTION: Adhesion Variants
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
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1  COMPUTER READABLE FORM:
2  MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
3  COMPUTER: IBM PC compatible
4  OPERATING SYSTEM: PC-DOS/MS-DOS
5  SOFTWARE: patin (Genentech)
6  CURRENT APPLICATION DATA:
7  APPLICATION NUMBER: US/08/457,918
8  FILING DATE: 1-JUN-1995
9  CLASSIFICATION: 435
10 PRIOR APPLICATION DATA:
11 APPLICATION NUMBER: 08/236311
12 FILING DATE: 02-MAY-1994
13 PRIOR APPLICATION DATA:
14 APPLICATION NUMBER: 07/936190
15 FILING DATE: 26-AUG-1992
16 PRIOR APPLICATION DATA:
17 APPLICATION NUMBER: 07/842777
18 FILING DATE: 18-FEB-1992
19 PRIOR APPLICATION DATA:
20 APPLICATION NUMBER: 07/250785
21 FILING DATE: 28-SEP-1988
22 PRIOR APPLICATION DATA:
23 APPLICATION NUMBER: 07/104329
24 FILING DATE: 02-OCT-1987
25 ATTORNEY/AGENT INFORMATION:
26 NAME: Kubinec, Jeffrey S.
27 REGISTRATION NUMBER: 36,575
28 REFERENCE/DOCKET NUMBER: P0444P1C3
29 TELECOMMUNICATION INFORMATION:
30 TELEPHONE: 415/225-8228
31 TELEFAX: 415/952-9881
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Oy 386 VLPTWSTPEP 396
Db 361 VLPTWSTPEP 371

RESULT 46

US-08-808-374-1
; Sequence 1, Application US/08808374
; Patent No. 5961976
; GENERAL INFORMATION:
; APPLICANT: Wang, Chang Yi
; TITLE OF INVENTION: Antibody Against a Host Cell
; TITLE OF INVENTION: Antigen Complex for Pre- and Post-Exposure
; TITLE OF INVENTION: Protection from Infection by HIV Primary Isolates
; NUMBER OF SEQUENCES: 2
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Maria C.H. Lin
; STREET: 345 Park Avenue
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10154-0053
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version
; SOFTWARE: #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/808.374
; FILING DATE: 28-Feb-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/657,149
; FILING DATE: 03-June-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Maria C.H. Lin
; REGISTRATION NUMBER: 29,323
; REFERENCE/DOCKET NUMBER: 1151-4145
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212)415-8745
; TELEFAX: (212)751-6849
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 433 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-808-374-1

Query Match 55.7%; Score 1901; DB 2; Length 433;

Best Local Similarity 99.2%; Pred. No. 4,9e-145; Indels 0; Gaps 0;

Matches 368; Conservative 1; Mismatches 2;

Oy 26 NKVVGKGGDTVELCTASQKKSIOFHKNSNOIKILNQSFLTKGSKLNDRAISRSL 85
Db 1 NKVVGKGGDTVELCTASQKKSIOFHKNSNOIKILNQSFLTKGSKLNDRAISRSL 60
Oy 86 LMDQNPFLIKNLKIEDSDTYICEVEDQKEVQLLVFGLTANSDTHLLQGSLTLTLES 145
Db 61 LMDQNPFLIKNLKIEDSDTYICEVEDQKEVQLLVFGLTANSDTHLLQGSLTLTLES 120
Oy 146 PGSSPSVQCSPPRKNIQGGKTLVSQLELDSDGTWCTVLOKQKVEFKIDIVVLAFO 205
Db 121 PGSSPSVQCSPPRKNIQGGKTLVSQLELDSDGTWCTVLOKQKVEFKIDIVVLAFO 180
Oy 206 KASISVYKKEGQVFEFPLAFTVEKLTGSGELMWQARASSSKSMITFDLKNKEVSVR 265
Db 181 KASISVYKKEGQVFEFPLAFTVEKLTGSGELMWQARASSSKSMITFDLKNKEVSVR 240
Oy 266 VTQDBKLOMGKKLPLHLTLPQALPOYAGSGNLTALAEKTKGLHGVNVLVVRATOLQKN 325
Db 266 VTQDBKLOMGKKLPLHLTLPQALPOYAGSGNLTALAEKTKGLHGVNVLVVRATOLQKN 325

Db 241 VTQDBKLOMGKKLPLHLTLPQALPOYAGSGNLTALAEKTKGLHGVNVLVVRATOLQKN 300
Oy 326 LTCVWGPSTPKMLSLKLENKAKVSKREKPVVNLNPEAGMQLLSDSGVLLAESNIK 385
Db 301 LTCVWGPSTPKMLSLKLENKAKVSKREKPVVNLNPEAGMQLLSDSGVLLAESNIK 360
Oy 386 VLPTWSTPEP 396
Db 361 VLPTWSTPEP 371

RESULT 47

US-09-100-409A-1
; Sequence 1, Application US/09100409A
; Patent No. 6090388
; GENERAL INFORMATION:
; APPLICANT: Wang, Chang Yi
; TITLE OF INVENTION: PEPTIDE COMPOSITION FOR
; TITLE OF INVENTION: PREVENTION AND TREATMENT OF HIV INFECTION AND
; TITLE OF INVENTION: IMMUNE DISORDERS
; NUMBER OF SEQUENCES: 64
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MORGAN & FINNEGAN
; STREET: 345 Park Avenue
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10154-0054
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version
; SOFTWARE: #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/100.409A
; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME:
; REGISTRATION NUMBER:
; REFERENCE/DOCKET NUMBER: 1151-4154
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-758-4800
; TELEFAX: 212-751-6849
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 433 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-09-100-409A-1

Query Match 55.5%; Score 1896; DB 3; Length 433;

Best Local Similarity 99.2%; Pred. No. 1.2e-144; Indels 0; Gaps 0;

Matches 367; Conservative 1; Mismatches 2;

Oy 27 KVVVGKGGDTVELCTASQKKSIOFHKNSNOIKILNQSFLTKGSKLNDRAISRSL 86
Db 2 KVVVGKGGDTVELCTASQKKSIOFHKNSNOIKILNQSFLTKGSKLNDRAISRSL 61
Oy 87 WQGNPFLIKNLKIEDSDTYICEVEDQKEVQLLVFGLTANSDTHLLQGSLTLTLES 146
Db 62 WQGNPFLIKNLKIEDSDTYICEVEDQKEVQLLVFGLTANSDTHLLQGSLTLTLES 121
Oy 147 PGSSPSVQCSPPRKNIQGGKTLVSQLELDSDGTWCTVLOKQKVEFKIDIVVLAFO 206
Db 122 PGSSPSVQCSPPRKNIQGGKTLVSQLELDSDGTWCTVLOKQKVEFKIDIVVLAFO 181
Oy 207 ASSISVYKKEGQVFEFPLAFTVEKLTGSGELMWQARASSSKSMITFDLKNKEVSVR 266
Db 182 ASSISVYKKEGQVFEFPLAFTVEKLTGSGELMWQARASSSKSMITFDLKNKEVSVR 241

QY 267 TDDPKLQMGKKLPLHLTLPLPOLPOYAGSGNLTLEAKTGKLGHOEVNLVVMRATOLQKNL 326
| | | | |
DB 242 TDDPKLQMGKKLPLHLTLPLPOLPOYAGSGNLTLEAKTGKLGHOEVNLVVMRATOLQKNL 301
| | | | |
QY 327 TCEVWGPTSPKMLSLKLENKAKVSKREKPVVNLNPEAGMOCCLSDSGOVLLESNIV 386
| | | | |
DB 302 TCEVWGPTSPKMLSLKLENKAKVSKREKPVVNLNPEAGMOCCLSDSGOVLLESNIV 361
| | | | |
QY 387 LPTWSTPVEP 396
| | | | |
DB 362 LPTWSTPVEP 371
| | | | |
RESULT 48
5171838-13
/ Patent No. 5171838
/ APPLICANT: CHIBA, YUKINOBU
/ TITLE OF INVENTION: LEU3A BINDING PEPTIDES
/ NUMBER OF SEQUENCES: 24
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/07/526,921
/ FILING DATE: 22-MAY-1990
/ SEQ ID NO:13
/ LENGTH: 433
5171838-13
Query Match 49.9%; Score 1704; DB 6; Length 433;
Best Local Similarity 91.0%; Pred. No. 3.7e-129;
Matches 343; Conservative 7; Mismatches 13; Indels 14; Gaps 4;
QY 27 KVLGKGGDTVELTCTASOKKSIOFHKNSNOIKILGNGSFLTKGSKLNDRAISR 85
| | | | |
DB 2 KVLGKGGDTVELTCTASOKKSIOFHKNSNOIKILGNGSFLTKGSKLNDRAISR 61
| | | | |
QY 86 ----LMDQNFPLIINKLIEDSDTYICEVEDQKEEVQLVFGLTANSPTHLLOQSL 139
| | | | |
DB 62 NOIKILGNGSF-LTGKPSKLNDRADS-----RRSEEVQLVFGLTANSPTHLLOQSL 114
| | | | |
QY 140 TLTLESPPSSPVQCRSPRKNIOGGKTLVSQLELQDSGTCTVLQNKKEFKIDI 199
| | | | |
DB 115 TLTLESPPSSPVQCRSPRKNIOGGKTLVSQLELQDSGTCTVLQNKKEFKIDI 174
| | | | |
QY 200 VVLAFOKASSIVYKKEGEVFSFPLAFTVEKLTGSGELMWAERASSSKNITFDLKNK 259
| | | | |
DB 175 VVLAFOKASSIVYKKEGEVFSFPLAFTVEKLTGSGELMWAERASSSKNITFDLKNK 234
| | | | |
QY 260 EYSVKRVTPDPLQMGKKLPLHLTLPLPOLPOYAGSGNLTLEAKTGKLGHOEVNLVVMRA 319
| | | | |
DB 235 EYSVKRVTPDPLQMGKKLPLHLTLPLPOLPOYAGSGNLTLEAKTGKLGHOEVNLVVMRA 294
| | | | |
QY 320 TLOLQKLTCEVWGPTSPKMLSLKLENKAKVSKREKPVVNLNPEAGMOCCLSDSGOVL 379
| | | | |
DB 295 TLOLQKLTCEVWGPTSPKMLSLKLENKAKVSKREKPVVNLNPEAGMOCCLSDSGOVL 354
| | | | |
QY 380 LESNIKVLPTWSTPVEP 396
| | | | |
DB 355 LESNIKVLPTWSTPVEP 371
| | | | |
RESULT 49
US-08-630-172-17
/ Sequence 17, Application US/08630172
/ Patent No. 6060054
/ GENERAL INFORMATION:
/ APPLICANT: Staerz, Uwe
/ TITLE OF INVENTION: NOVEL PRODUCT AND PROCESS FOR T
/ TITLE OF INVENTION: LYMPHOCYTE VETO
/ NUMBER OF SEQUENCES: 41
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Sheridan Ross & McIntosh
/ STREET: 1700 Lincoln Street, 35th Floor
/ CITY: Denver
/ STATE: Colorado

/ COUNTRY: U.S.
/ ZIP: 80203
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/630,172
/ FILING DATE:
/ CLASSIFICATION: 514
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Connell, Gary J.
/ REGISTRATION NUMBER: 32, 020
/ REFERENCE/DOCKET NUMBER: 2879-36
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (303) 863-9700
/ TELEFAX: (303) 863-0223
/ INFORMATION FOR SEQ ID NO: 17:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 410 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
US-08-630-172-17
Query Match 46.9%; Score 1599.5; DB 3; Length 410;
Best Local Similarity 54.0%; Pred. No. 9.2e-121;
Matches 325; Conservative 35; Mismatches 47; Indels 195; Gaps 6;
QY 26 KVLGKGGDTVELTCTASOKKSIOFHKNSNOIKILGNGSFLTKGSKLNDRAISR 85
| | | | |
DB 1 KVLGKGGDTVELTCTASOKKSIOFHKNSNOIKILGNGSFLTKGSKLNDRAISR 60
| | | | |
QY 86 LMDQNFPLIINKLIEDSDTYICEVEDQKEEVQLVFGLTANSPTHLLOQSLTLLES 145
| | | | |
DB 61 LMDQNFPLIINKLIEDSDTYICEVEDQKEEVQLVFGLTANSPTHLLOQSLTLLES 120
| | | | |
QY 146 PGGSSPVQCRSPRKNIOGGKTLVSQLELQDSGTCTVLQNKKEFKIDIYVLA 205
| | | | |
DB 121 PGGSSPVQCRSPRKNIOGGKTLVSQLELQDSGTCTVLQNKKEFKIDIYVLA 178
| | | | |
QY 206 KASSIVYKKEGEVFSFPLAFTVEKLTGSGELMWAERASSSKNITFDLKNKEVSVR 265
| | | | |
DB 179 ----- 178
| | | | |
QY 266 VTDDPKLQMGKKLPLHLTLPLPOLPOYAGSGNLTLEAKTGKLGHOEVNLVVMRATOLQKN 325
| | | | |
DB 179 ---EPR----- 181
| | | | |
QY 326 LTCVWGPTSPKMLSLKLENKAKVSKREKPVVNLNPEAGMOCCLSDSGOVLLESNIK 385
| | | | |
DB 182 ----GPT----- 184
| | | | |
QY 386 VLPWSTPVEPKSCDKHTCP--CPAPELLGSPSVLPFPKPKDTLMISRTPEVTCVV 443
| | | | |
DB 185 -----IKP-----CPCKCPAPNLLGSPSVLPFPKPKDTLMISRTPEVTCVV 228
| | | | |
QY 444 DVSHEDPEVKFNWYDGVENAKTKPREQYNSTYRVVSLTVLHQDLNGKEKCYVS 503
| | | | |
DB 229 DVSHEDPDVQISWFPNNVEVHTAQOTHRREDYNSLRVYSLPIQHODMWSGKEKCYVN 288
| | | | |
QY 504 NKALPAPLEKTIISAKGQPREBOYTLTPSSDELTKNOVSLTCLVKGFPDIDIAVWESN 563
| | | | |
DB 289 NKDLPAPIERTISKPKGSVRAPOVYVLEPP--EEMTKQVTLTCVWTFMPEDIVYEMTN 347
| | | | |
QY 544 GQENNYKTPPVVLDSDSFLYSLKLTVDKSRMOQGVFSCVWHEALHNYTOKSLSS 623
| | | | |
DB 348 GKTELVNNTPEVLDSDSYFMYSKLVKQVWERNYSYSCVWHEGLNHHHTTKSFSRT 407
| | | | |
QY 624 PG 625
| | | | |
DB 408 PG 409
| | | | |

```
RESULT 50
US-09-375-419-17
; Sequence 17, Application US/09375419
; Patent No. 6264950
; GENERAL INFORMATION:
; APPLICANT: Staetz, Uwe
; TITLE OF INVENTION: NOVEL PRODUCT AND PROCESS FOR T
; TITLE OF INVENTION: LYMPHOCYTE VETO
; NUMBER OF SEQUENCES: 41
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sheridan Ross & McIntosh
; STREET: 1700 Lincoln Street, 35th Floor
; CITY: Denver
; STATE: Colorado
; COUNTRY: U.S.
; ZIP: 80203
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/375,419
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/630,172
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Connell, Gary J.
; REGISTRATION NUMBER: 32,020
; REFERENCE/DOCKET NUMBER: 2879-36
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (303) 863-9700
; TELEFAX: (303) 863-0223
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 410 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-375-419-17

Query Match      46.9%; Score 1599.5; DB 3; Length 410;
Beet Local Similarity 54.0%; Pred. No. 9,2e-121;
Matches 325; Conservative 35; Mismatches 47; Indels 195; Gaps 6;

QY      26 NKVVGGKGDVVELTCTASQKKSIOFHWKNSNOIKILNQGSFLTKGSKLNDRADSRRS 85
      1 NKVVGGKGDVVELTCTASQKKSIOFHWKNSNOIKILNQGSFLTKGSKLNDRADSRRS 60
QY      86 LMDQGNFLIITKILKIEDSDTYICEVEDQKEEVOLLVFGLTANSSTHLLQGSLLTLES 145
      61 LMDQGNFLIITKILKIEDSDTYICEVEDQKEEVOLLVFGLTANSSTHLLQGSLLTLES 120
QY      146 PGSSPSVQCSBPRKNIQGGKTLVSQLELQDSTGTCVLYQNKKEFKIDIVYLAFO 205
      121 PGSSPSVQCSBPRKNIQGGKTLVSQLELQDSTGTCVLYQNKKEFKIDIVYLA-- 178
QY      206 KASISIVYKKEGQVBFSPFLAFTVEKLTGSGELMWQABRASSSKSWITFDLKNKEVSYKR 265
      179 ----- 178
DB      266 VTQDPKLOMGKKLPLHLTPQALPOYAGSGNLTALAEAKTGLQEVNLVVMRATOLQKN 325
      179 ---EBR----- 181
QY      326 LTCFVWGPTSPKTLMLSTLENKAQVSKREKPVWVLANPEAGMWQCLLSDSGVLLSENIK 385
      182 -----GPT----- 184
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QY      386 VLPTWSVPEBKSCDKHTTCEP--CPAPELLGGSVFLFPKPKDITMISRTPEVTCVV 443
      185 -----IKP-----CPCKCPAPNLLGSPSVFIFPKIKIDVLMISLSPIVTCVV 228
QY      444 DVSHEDPEYKENWVVDGVEVHNATKPREEOYNSTYVSLVTLHODMLNGKRYKCVS 503
      229 DVSEDDPDVQISWPNVNEVHTAQTQTHREDYNSRLVNSALPIQHDMSGKFKCKVN 288
QY      504 NKALPAPIEKTISAKQOPREPQVYTLPPSRDELTKQVSLTCLVKGFPSPDIAMWESN 563
      289 NKDLPAPIERTISKPKSVAPQVYVLPPE-EEWTKQVTLTCVTDPMPEDIYVENTNN 347
QY      564 GQPENNYKTPPVVLDSDGSFFLYSKLTVDKSRWQGNVFGSCVMEALHNNYTKSLSL 623
      348 GKTLELANKTEPVLDSDGSYFMYSKLRVEKKNWERNSSYSCSVVHEGLHNNHTTKSFRT 407
DB      624 PG 625
      408 PG 409
```

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RESULT 51
US-08-284-391B-33
; Sequence 33, Application US/08284391B
; Patent No. 5851828
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; APPLICANT: Banapour, Babak
; APPLICANT: Romeo, Charles
; APPLICANT: Kolanus, Waldemar
; TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/284,391B
; FILING DATE: 02-AUG-1994
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/195,395
; FILING DATE: 14-FEB-1994
; APPLICATION NUMBER: 07/847,566
; FILING DATE: 06-MAR-1992
; APPLICATION NUMBER: 07/665,961
; FILING DATE: 07-MAR-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Elbing, Karen L
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/247001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
; TELEX:
; INFORMATION FOR SEQ ID NO: 33:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 254 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-284-391B-33
```

```

Query Match      40.6%; Score 1385; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 8.9e-104;
Matches 254; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 395 EPKSCDKHTTCCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 454
      1 EPKSCDKHTTCCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60
DB 455 NMVYDGEVHNNAKTKPREQYNSTYRVSVLTVLHODMNGEKYCKCKVSNKALPAPIETK 514
      61 NMVYDGEVHNNAKTKPREQYNSTYRVSVLTVLHODMNGEKYCKCKVSNKALPAPIETK 120
QY 515 ISKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTP 574
      121 ISKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTP 180
DB 575 PVLDSGSPFLYSKLTVDKSRWQGNVFCGVMEALHNHYTQKSLSLSPGQLDETCAE 634
      181 PVLDSGSPFLYSKLTVDKSRWQGNVFCGVMEALHNHYTQKSLSLSPGQLDETCAE 240
QY 635 AODGELDGLMTTDP 648
      241 AODGELDGLMTTDP 254
DB

RESULT 52
US-09-218-950-33
Sequence 33, Application US/09218950
Patent No. 6284240
GENERAL INFORMATION:
APPLICANT: Seed, Brian
APPLICANT: Banapour, Babak
APPLICANT: Romeo, Charles
APPLICANT: Kolanus, Waldemar
TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
NUMBER OF SEQUENCES: 53
CELLS BY CHIMERIC CD4 RECEPTOR-BEARING CELLS
CORRESPONDENCE ADDRESS:
ADDRESSER: Clark & Elbing LLP
STREET: 176 Federal Street
CITY: Boston
STATE: MA
COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/218,950
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/284,391
FILING DATE: 02-AUG-1994
APPLICATION NUMBER: 08/195,395
FILING DATE: 14-FEB-1994
APPLICATION NUMBER: 07/847,566
FILING DATE: 06-MAR-1992
APPLICATION NUMBER: 07/665,961
FILING DATE: 07-MAR-1991
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/247001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
TELEX:
INFORMATION FOR SEQ ID NO: 33:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids

```

```

TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-218-950-33

Query Match      40.6%; Score 1385; DB 3; Length 254;
Best Local Similarity 100.0%; Pred. No. 8.9e-104;
Matches 254; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 395 EPKSCDKHTTCCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 454
      1 EPKSCDKHTTCCPPCAPPELLGGPSVFLFPPPKDITLMISRTPEVTCVVDVSHEDPEVKF 60
DB 455 NMVYDGEVHNNAKTKPREQYNSTYRVSVLTVLHODMNGEKYCKCKVSNKALPAPIETK 514
      61 NMVYDGEVHNNAKTKPREQYNSTYRVSVLTVLHODMNGEKYCKCKVSNKALPAPIETK 120
QY 515 ISKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTP 574
      121 ISKAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTP 180
DB 575 PVLDSGSPFLYSKLTVDKSRWQGNVFCGVMEALHNHYTQKSLSLSPGQLDETCAE 634
      181 PVLDSGSPFLYSKLTVDKSRWQGNVFCGVMEALHNHYTQKSLSLSPGQLDETCAE 240
QY 635 AODGELDGLMTTDP 648
      241 AODGELDGLMTTDP 254
DB

RESULT 53
5223394-11
Patent No. 5223394
APPLICANT: WALINER, BARBARA
TITLE OF INVENTION: RECOMBINANT DNA MOLECULE COMPRISING
LYMPHOCYTE FUNCTION-ASSOCIATED ANTIGEN 3 PHOSPHATIDYLINOSITOL
LINKAGE SIGNAL SEQUENCE
NUMBER OF SEQUENCES: 12
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/335,688
FILING DATE: 10-APR-1989
SEQ ID NO: 11
LENGTH: 318
5223394-11

Query Match      40.1%; Score 1368; DB 6; Length 318;
Best Local Similarity 93.4%; Pred. No. 2.9e-102;
Matches 268; Conservative 4; Mismatches 15; Indels 0; Gaps 0;

QY 1 NMRGVPFRHLVLTQALIPATQGNKYVLGKKGTVELTCTASQKSIQFMKNSNQIK 60
      1 NMRGVPFRHLVLTQALIPATQGNKYVLGKKGTVELTCTASQKSIQFMKNSNQIK 60
DB 61 IIGNGSFLTKGSPSKLNDRAISRSLMDQGNFPLIIKMLKIBSDTYICEVEDQKEVQL 120
      61 IIGNGSFLTKGSPSKLNDRAISRSLMDQGNFPLIIKMLKIBSDTYICEVEDQKEVQL 120
QY 121 LVFGLTANSDTHLLOGOSLTTLTLESPGSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
      121 LVFGLTANSDTHLLOGOSLTTLTLESPGSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
DB 121 LVFGLTANSDTHLLOGOSLTTLTLESPGSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
      121 LVFGLTANSDTHLLOGOSLTTLTLESPGSPSVQCRSPRGKNIQGGKTLVSQLELODSG 180
QY 181 TWTCTVLQNKQKVERKIDIVLAFQKASSIVYKKEGEVSEFPLAFVYEKLTSGGELMW 240
      181 TWTCTVLQNKQKVERKIDIVLAFQKASSIVYKKEGEVSEFPLAFVYEKLTSGGELMW 240
DB 181 TWTCTVLQNKQKVERKIDIVLAFQKASSIVYKKEGEVSEFPLAFVYEKLTSGGELMW 240
      181 TWTCTVLQNKQKVERKIDIVLAFQKASSIVYKKEGEVSEFPLAFVYEKLTSGGELMW 240
QY 241 QAEPASSSKSWITTFDLKKEVSVKRVISNPLFNTTSSIIITTCIPSS 287
      241 QAEPASSSKSWITTFDLKKEVSVKRVISNPLFNTTSSIIITTCIPSS 287
DB 241 QAEPASSSKSWITTFDLKKEVSVKRVISNPLFNTTSSIIITTCIPSS 287
      241 QAEPASSSKSWITTFDLKKEVSVKRVISNPLFNTTSSIIITTCIPSS 287

RESULT 54
5223394-9

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; Patent No. 5223394
; APPLICANT: WALLNER, BARBARA
; TITLE OF INVENTION: RECOMBINANT DNA MOLECULE COMPRISING
; LYMPHOCYTE FUNCTION-ASSOCIATED ANTIGEN 3 PHOSPHATIDYLINOSITOL
; LINKAGE SIGNAL SEQUENCE
; NUMBER OF SEQUENCES: 12
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/335,688
; FILING DATE: 10-APR-1989
; SEQ ID NO: 9
; LENGTH: 295
5223394-9
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Query Match          39.9%; Score 1363; DB 6; Length 295;
Best Local Similarity 99.3%; Pred. No. 6,6e-102;
Matches 266; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 1 MNRGVPFPHLLIVLQALIPAAATGKNVVLGKKGDVTELTCTASQKSIQFHWKNSNQIK 60
DB 1 MNRGVPFPHLLIVLQALIPAAATGKNVVLGKKGDVTELTCTASQKSIQFHWKNSNQIK 60
QY 61 ILGNQGSFLTGGPSKLNDRSRSLMDQGNFPLIKKLTEDSTYICVEDQKEEVOL 120
DB 61 ILGNQGSFLTGGPSKLNDRSRSLMDQGNFPLIKKLTEDSTYICVEDQKEEVOL 120
QY 121 LVFGLTANSDDLHLOGQSLTTLTLESPPGSSPSVQCRSPRGKNIQCGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDDLHLOGQSLTTLTLESPPGSSPSVQCRSPRGKNIQCGKTLVSQLELDQSG 180
QY 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIVYKKEGOVEFSFPLAFTVEKLTGSGELMW 240
DB 181 TWTCTVLONOKKVEFKIDIVLAFQKASSIVYKKEGOVEFSFPLAFTVEKLTGSGELMW 240
QY 241 QAERASSSKSWITFDLKNKEVSVKRVTQ 268
DB 241 QAERASSSKSWITFDLKNKEVSVKRVTQ 268
```

```
RESULT 55
US-09-313-942-8
; Sequence 8, Application US/09313942
; Patent No. 6472179
; GENERAL INFORMATION:
; APPLICANT: REGENERON PHARMACEUTICALS, INC.
; TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
; FILE REFERENCE: REG 203-A
; CURRENT APPLICATION NUMBER: US/09/313,942
; CURRENT FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 09/313,942
; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: 60/101,858
; PRIOR FILING DATE: 1998-09-25
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 592
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-313-942-8
```

```
Query Match          38.7%; Score 1320; DB 4; Length 592;
Best Local Similarity 48.3%; Pred. No. 5,4e-98;
Matches 312; Conservative 53; Mismatches 161; Indels 120; Gaps 18;
```

```
QY 20 PAATGKNVVLGKKGDVTELTCTASQ-KKSIQFHWKNSNQIKILGNQGSFLTGGPSKLN 78
DB 26 PAQEVARGGLTSLPDSVTLTCTGVEPEDNATVH-----VLRKPA----- 66
QY 79 RADSRSLMDQGNFPLIKKLTEDSTYIC-----VEDQKEEVOLLVFGLT 126
DB 67 -AGSHPSRWAGNRRLLRSVQLHDSGNISCYRAGRPAQTVHLLVDPVEEPQLSCFRKS 125
```

```
QY 127 ANSDTHLLOGQSLTTLTLESPPGSSPSVQCRSPRGKNIQCGKTLVSQLELDQSGTWTCTV 186
DB 126 PLSN-----VCEMGWRSTPLSTTKA-----VLLVRKQNSPADPQBPCC 165
QY 187 LONQKVEFKIDIVLAFQKASSIVYKKEGOVEFSFPLAFTVEKLTGSGELM----- 238
DB 166 QYSQESQKFSQCLAVPBGDSFFYIVSMCVASVSGSKSKTQTFQ---CGCLIQDPPANI 222
QY 239 -----W-----WOAERASSSKSW-ITFDLKNKEVSVKRVTQDPKLOMGKLLPLHLT 283
DB 223 TTTVAANPRKSLTWTQDPHSHSNSSFYRLRFEIARABRSKTFY---TMVKKLOQHHCV 278
QY 284 LPQALPOYAGSGNLTLLAEAKTGKLNQEVNLVNRATQLOKNTLCEVWGPTSPKMLSLK 343
DB 279 IH-----DAMSGLRH-----VQGRRA---QEFQCGEWSWSPAMGTPW 315
QY 344 LENK-----EAKVSGREKRPWVTLNPEAGMOCCLSDSQVLESNIKVLPTSTVEPESC 399
DB 316 TESRSPPAENRVS---TPMOALTTNKDDNLTLPDSDS-----ANATSLPVQDAG-EPKSC 365
QY 400 DKHTTCCPPAPBELLGGPSVFLPFPKPKDITLMSRTPEVTCVVVDVSHEDPEVKFNMYVD 459
DB 366 DKHTTCCPPAPBELLGGPSVFLPFPKPKDITLMSRTPEVTCVVVDVSHEDPEVKFNMYVD 425
QY 460 GVEVHNAKTKRREQDYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK 519
DB 426 GVEVHNAKTKRREQDYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK 485
QY 520 GQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGOEENNYKTTTPVLDS 579
DB 486 GQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEHESNGOEENNYKTTTPVLDS 545
QY 580 DGSFPLYSKLTVDKSRMQQGVNFCISYMHAEALHNHYTQKSLSLSPG 625
DB 546 DGSFPLYSKLTVDKSRMQQGVNFCISYMHAEALHNHYTQKSLSLSPG 591
```

```
RESULT 56
US-09-499-846-2
; Sequence 2, Application US/09499846
; Patent No. 6656728
; GENERAL INFORMATION:
; APPLICANT: Kavanaugh et al.
; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
; FILE REFERENCE: 035764/195012 (5794-
; CURRENT APPLICATION NUMBER: US/09/499,846
; CURRENT FILING DATE: 2000-02-07
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 622
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-499-846-2
```

```
Query Match          37.8%; Score 1292; DB 4; Length 622;
Best Local Similarity 49.4%; Pred. No. 1e-95;
Matches 304; Conservative 47; Mismatches 117; Indels 148; Gaps 22;
```

```
QY 109 CEVEDQKEEVQLVFGI-TANSDDLHLOGQSLTTLTLESPPGSSPSVQC--RSRPGK----- 161
DB 55 CRLLDDVQSLNRLMDGVLAESNRTRTGEEVEVQ-DSVPADSLVACVSSPSGSPPTY 113
QY 162 ---NIQGKTLVSQLELDQSGT-----WTCTVLONQKVEFKIDIVL 202
DB 114 FSVVNVSDALPSSBEDDDSSSEKETDTPKPNVAPVYT-----SPKXVEKXLAHV-- 166
QY 203 AFQKASSIVYKKEGOVEFSFPLAFTVE-KLTGSGELMWQERASSSKSWITFDLKN-KX 260
DB 167 -----PAKTVKFKCPSSG-----TNPPLTRW---LKNQKE 194
QY 261 VSVKRVTDPKLOMG---KKLPLHLTPQALPOYAGSGNLTLLAEAKTGKLNQHOEVNL-V 315
```

```
Db 195 FK-----PDHIGYKVRATWMSIIMDSVP--SDKNIYCTIVENEGSINH7QULV 245
Qy 316 VNRATO---LQKVL-----TCEVWGPTSPKLMSLKLE----- 345
Db 246 VERSPRRLIQAOLPANKTVALGNSVEFMCKVYSDQPHIOMLKHEIVNGSKIGPNLPY 305
Qy 346 ---NKEAKYKREKPYVNLN-----PBAQMGCLISDS----- 375
Db 306 VOILKTAGVNTTDXEVEVHLNRVNSPEDAGEYTCLGNSITGLSHSAMLTVLEAPERPA 365
Qy 376 ---GQVLLSNIKVLPTWS--TP--VEPKSCDKHTPCPCPAPELLGSPVFLPPPKPDT 429
Db 366 VMSPLYSRGLVLRGSGSPGLQPKSGDKHTPCPCPAPELLGSPVFLPPPKPDT 425
Qy 430 LMSRTPVTCVVDVSHEDPEVKFMYVDGVEVHNNAKTKPREEOYNSTYRVSVLTVLH 489
Db 426 LMSRTPVTCVVDVSHEDPEVKFMYVDGVEVHNNAKTKPREEOYNSTYRVSVLTVLH 485
Qy 490 ODMLNKEKCKVSNKALPAPIEKTISKAGPREPOVYTLPPSRDELTKNOVSLTCLVK 549
Db 486 QDMLNKEKCKVSNKALPAPIEKTISKAGPREPOVYTLPPSRDELTKNOVSLTCLVK 545
Qy 550 GFYPSDIAVWESNGQPENNYKTPPVLDSDGSFLYSKLTVDKSRMOQGNVFSQVME 609
Db 546 GFYPSDIAVWESNGQPENNYKTPPVLDSDGSFLYSKLTVDKSRMOQGNVFSQVME 605
Qy 610 ALHNHYTKSLSLSPG 625
Db 606 ALHNHYTKSLSLSPG 621
```

RESULT 57

```
US-08-157-101A-7
; Sequence 7, Application US/08157101A
; Patent No. 5808032
; GENERAL INFORMATION:
; APPLICANT: KUBIHARA, TATSUYA
; APPLICANT: MATSUKURA, SHIGEKAZU
; APPLICANT: TSURUOKA, NOBUO
; APPLICANT: ARIMA, KENJI
; APPLICANT: NISHIHARA, TATSURO
; TITLE OF INVENTION: ANTI-HBc ANTIBODY GENES AND EXPRESSION
; TITLE OF INVENTION: PLASMIDS THEREFOR
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PILLSBURY, MADISON & SUTRO
; STREET: 1100 NEW YORK AVENUE, N.W.
; CITY: WASHINGTON
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08157,101A
; FILING DATE: 05-APR-1994
; CLASSIFICATION: 510
; ATTORNEY/AGENT INFORMATION:
; NAME: TITUS, MARLANA K
; REGISTRATION NUMBER: 35843
; REFERENCE/DOCKET NUMBER: 9437/204199
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-861-3711
; TELEFAX: 202-822-0944
; TELEX: 6714627 CUCH
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 459 amino acids
; TYPE: amino acid
```

```
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-157-101A-7
```

Query Match 37.7%; Score 1288.5; DB 1; Length 459;
Best local similarity 48.4%; Pred. No. 1.3e-95;
Matches 298; Conservative 38; Mismatches 91; Indels 189; Gaps 21;

```
Qy 25 GNKVVLGKKGDVETLCTAS--QKKSIOFH-----KNSNOIKL--GNQGSFL--TK 71
Db 17 GCGVV--QPGSRILRLSCAASGFTFSSNGMHWRAQAPGKGLVAVILYDGNHKKFYADSVK 74
Qy 72 GSKLNDRADSRSLMDQNFPLIITKNIKIEDSDIYICEVEHQKEVQLVFGILANSOT 131
Db 75 GFTTS--RNSKNITLY-----LEVKSILQTEDTGYVC--IRQ-----TYGV----- 113
Qy 112 HLQ--GQSLTLTLSPSSPSVQCRSPRGKNIQKGTLSVQLELQDSGTWCTVLQN 189
Db 114 HRFDMGCGTLVTVSASATKGSVFPLAPSSKSTSG--TALGCL----- 157
Qy 190 QKKEFKIDIVVLAFQKASSIVYKKEGEQVEFSPFLATVEKLTGSGELMQAERASSK 249
Db 158 -----VKDYFPEPVTVS-----WNSGALASG- 178
Qy 250 SWITFDLNKKEVSVKRVYQDPKLGKGLPLHLTLPLQALPYQASGNLTALAEATGKLH 309
Db 179 -----VH--TEPAVL--QSSGLVSLSSVTVTPSSSLG 206
Qy 310 QEVNLVWRATQLOKNLTCCEVWGPTSPKLMLSLKLENKBAKYSKREKPYVWVNLPEAGMW 369
Db 207 TQTYI-----CNV-----NHP----- 218
Qy 370 CLSDSGQVLLSNIKVLPTWSTPVKPKSCDKHTPCPCPAPELLGSPVFLPPPKPDT 429
Db 219 -----SNKTV-----DKVEPKSCDKHTPCPCPAPELLGSPVFLPPPKPDT 262
Qy 430 LMSRTPVTCVVDVSHEDPEVKFMYVDGVEVHNNAKTKPREEOYNSTYRVSVLTVLH 489
Db 263 LMSRTPVTCVVDVSHEDPEVKFMYVDGVEVHNNAKTKPREEOYNSTYRVSVLTVLH 322
Qy 490 ODMLNKEKCKVSNKALPAPIEKTISKAGPREPOVYTLPPSRDELTKNOVSLTCLVK 549
Db 323 QDMLNKEKCKVSNKALPAPIEKTISKAGPREPOVYTLPPSRDELTKNOVSLTCLVK 382
Qy 550 GFYPSDIAVWESNGQPENNYKTPPVLDSDGSFLYSKLTVDKSRMOQGNVFSQVME 609
Db 383 GFYPSDIAVWESNGQPENNYKTPPVLDSDGSFLYSKLTVDKSRMOQGNVFSQVME 442
Qy 610 ALHNHYTKSLSLSPG 625
Db 443 ALHNHYTKSLSLSPG 458
```

RESULT 58

```
US-08-397-411-7
; Sequence 7, Application US/08397411
; Patent No. 6129914
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Gingrich, Roger
; APPLICANT: Link, Brian
; APPLICANT: Tso, J. Yun
; TITLE OF INVENTION: Bispesific Antibody Effective to Treat
; TITLE OF INVENTION: B-Cell Lymphoma and Cell Line
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew
; STREET: One Market Plaza, Stewart Tower, Suite 2000
; CITY: San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94105
```

```
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/397,411
FILING DATE: 01-MAR-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/859,583
FILING DATE: 27-MAR-1992
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M.
REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 011823-004901
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-326-2400
TELEFAX: 415-326-2422
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 446 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-397-411-7
```

```
Query Match      37.7%; Score 1286.5; DB 3; Length 446;
Best Local Similarity 48.4%; Pred. No. 1.8e-95;
Matches 292; Conservative 33; Mismatches 103; Indels 175; Gaps 14;
```

```
OY 30 LGKKDTELTCTASOKKSIOF--HMKNNOIKILGNOSFLTQKPSKLNBRADRSRL- 86
DB 11 LKPBETISLTCTVSGFSLTNGVMWVQSPKGLFEMGVKMSGSTENAFISRLTIS 70
OY 87 --WDGNFPLIKLIKIEDSDTYICEVEDQKEVQLVFGLTANSDDLLO--GQSLTLT 142
DB 71 KDTSKNQVSLKLNLSLTADTAVYC-----ARNDRYAMDYMGQGLTIVT 113
OY 143 LESPPGSPSVOCSPRGKNIQGGKTLVSQLELDSGTWTCTVQNKQKVEFKIDIVL 202
DB 114 VSSASTKPSVPLPAPSSKSTSG--TAAIGCL----- 144
OY 203 AFQKASIVYKKEGQVEFSPLAFTVEKLTGSGELMWAERASSSKSMITFDLKNKEVS 262
DB 145 -----VKDYFPEPYTVS-----MNSGALTSG----- 165
OY 263 VKRVTQDEKLQWKKLPLHLTLPOALPOYAGSGNLTALAEAKTGKHQENVLVNMRATQL 322
DB 166 -----VH-TFPAVL-QSSGLYSLSVTVSSSLGTQYI----- 198
OY 323 QKNLTCEVWGPTSPKLMLSKLEKAEKVKREKVVNLNPRAGMWQCLLSDSGVLLS 382
DB 199 -----CNV-----NHR-----S 206
OY 383 NIKVLPTWSTPYEPKSCDKHTTCCPCPAPBELLGGSVFLFPKPKDTIMISRTPEVTCV 442
DB 207 NTKV-----DKVVEPSCDKHTTCCPCPAPBELLGGSVFLFPKPKDTIMISRTPEVTCV 262
OY 443 VDVSHEDEPVKFNWYVDGVEVNAKTKPREEQYNSTYRVSVLTVLHDMWLNKREYKCV 502
DB 263 VDVSHEDEPVKFNWYVDGVEVNAKTKPREEQYNSTYRVSVLTVLHDMWLNKREYKCV 322
OY 503 SNKALPAIEKTISSAKGQPREPOVYTLPPSRDELTKQVSLTCLVKGFFPSDIAVEMES 562
DB 323 SNKALPAIEKTISSAKGQPREPOVYTLPPSRDELTKQVSLTCLVKGFFPSDIAVEMES 382
OY 563 NGQPENNYKTTTPPVLDSDGSFFLYSKLTVDKSRMOQGNVFCSCVHREALHNYTQKSL 622
DB 383 NGQPENNYKTTTPPVLDSDGSFFLYSKLTVDKSRMOQGNVFCSCVHREALHNYTQKSL 442
OY 623 SPG 625
```

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DB 443 SPG 445
RESULT 59
US-09-499-846-6
; Sequence 6, Application US/09499846
; Patent No. 6656728
; GENERAL INFORMATION:
; APPLICANT: Kavanaugh et al.
; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
; TITLE OF INVENTION: RECEPTOR-IMMUNOGLOBULIN FUSION
; FILE REFERENCE: 035784/195012 (5784-
; CURRENT APPLICATION NUMBER: US/09/499,846
; CURRENT FILING DATE: 2000-02-07
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 497
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-499-846-6
```

```
Query Match      37.5%; Score 1281.5; DB 4; Length 497;
Best Local Similarity 68.1%; Pred. No. 5.3e-95;
Matches 258; Conservative 22; Mismatches 53; Indels 46; Gaps 6;
```

```
OY 293 GSGNLTALAEAKTGKLNQ---EVLVVMRATQLOKLN--TCEVWGPTSPKLMLSKLE-- 345
DB 118 GSINHTYQLDVERSPPHPILOAGLPANKTVVALLSNGVEMCKVTSDDQPHIQMLKHEVN 177
OY 346 -----NKEAKVSKREKPYVVLN-----PEAGMOCCLSDS-----GQ 377
DB 178 GSKTGPDLFPVYQLTKTAGVNTTDKEMEBVLHLRVNSFEDAGEYTCLAGNSIGLSHSAWL 237
OY 378 VLESNIKVLPTWSTPV-----EPKSCKHTTCCPCPAPBELLGGSVFLFPKPK 426
DB 238 TVLEALEERPAWMTSPLYLESGSGPGLQEPKSCDKHTTCCPCPAPBELLGGSVFLFPKPK 297
OY 427 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVNAKTKPREEQYNSTYRVSVLT 486
DB 298 KDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVNAKTKPREEQYNSTYRVSVLT 357
OY 487 VLDQWLNKREYKCVSNKALPAIEKTISSAKGQPREPOVYTLPPSRDELTKQVSLTLC 546
DB 358 VLDQWLNKREYKCVSNKALPAIEKTISSAKGQPREPOVYTLPPSRDELTKQVSLTLC 417
OY 547 LVKGFYPSDIAVEMESNGQPENNYKTTTPPVLDSDGSFFLYSKLTVDKSRMOQGNVFCSCV 606
DB 418 LVKGFYPSDIAVEMESNGQPENNYKTTTPPVLDSDGSFFLYSKLTVDKSRMOQGNVFCSCV 477
OY 607 MHEALHNYTQKSLSPG 625
DB 478 MHEALHNYTQKSLSPG 496
```

```
RESULT 60
US-09-499-846-4
; Sequence 4, Application US/09499846
; Patent No. 6656728
; GENERAL INFORMATION:
; APPLICANT: Kavanaugh et al.
; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
; TITLE OF INVENTION: RECEPTOR-IMMUNOGLOBULIN FUSION
; FILE REFERENCE: 035784/195012 (5784-
; CURRENT APPLICATION NUMBER: US/09/499,846
; CURRENT FILING DATE: 2000-02-07
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 525
; TYPE: PRT
; ORGANISM: Homo sapiens
```


US-09-499-846-4

Query Match 37.5%; Score 1281.5; DB 4; Length 525;
 Best Local Similarity 68.1%; Pred. No. 5.7e-95;
 Matches 258; Conservative 22; Mismatches 53; Indels 46; Gaps 6;

```

QY 293 GSGNLTALAEATKSKHQ---EVLNLYVMBATOLQKYL--TCEVWGPSTPKMLSLKLE-- 345
DB 146 GSINHTYQDVYVERSHRPIILQAGLPANKTVALGSLVNEEMCKVYSDPOHIMLKHIEN 205
QY 346 -----NKEAKVSKREKPVWYLN-----PEAGMOCCLSDS-----GQ 377
DB 206 GSKIGPDNLRYQILKTAGVNTTDKEMEVLHLRNVSFEADAGEYTCLAGNSIGLSHSAMYL 265
QY 378 VLLESIIKILPTWSTFV-----EPKSCDKHTTCTPCPAPRLLGGPSVFLPPRP 426
DB 266 TVLEALREERPAWMTSPLELGSGSPGLQEPKSCDKHTCTPCPAPRLLGGPSVFLPPRP 325
QY 427 KDTLMSRTPEVTCVVDVSHEDPEYKFMWYDGVENVNAKTKPREOYNSTYRVVSVLT 486
DB 326 KDTLMSRTPEVTCVVDVSHEDPEYKFMWYDGVENVNAKTKPREOYNSTYRVVSVLT 385
QY 487 VLHODMLNGKEYKCKVSNKALPAPLEKTSKAKGQPREPQVYTLPPSRDELTKNQVSLTLC 546
DB 386 VLHODMLNGKEYKCKVSNKALPAPLEKTSKAKGQPREPQVYTLPPSRDELTKNQVSLTLC 445
QY 547 LVKGFPSDIAYWESNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRWQGNVPSGCV 606
DB 446 LVKGFPSDIAYWESNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRWQGNVPSGCV 505
QY 607 MHEALHNHYTOKSLSLSPG 625
DB 506 MHEALHNHYTOKSLSLSPG 524

```

RESULT 61
 US-07-934-373C-22
 ; Sequence 22, Application US/07934373C
 ; Patent No. 5821337

GENERAL INFORMATION:
 APPLICANT: Paul J. Carter
 APPLICANT: Leonard G. Presta
 TITLE OF INVENTION: Immunoglobulin Variants
 NUMBER OF SEQUENCES: 48
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Genentech, Inc.
 STREET: 1 DNA Way
 CITY: South San Francisco
 STATE: California
 COUNTRY: USA
 ZIP: 94080
 COMPUTER READABLE FORM:
 MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Winpacin (Genentech)
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/07/934,373C
 FILING DATE: 21-Aug-1992
 CLASSIFICATION: 530
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: PCT/US92/05126
 FILING DATE: 15-JUN-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 07/715272
 FILING DATE: 14-JUN-1991
 ATTORNEY/AGENT INFORMATION:
 NAME: Lee, Wendy M.
 REGISTRATION NUMBER: 40,378
 REFERENCE/DOCKET NUMBER: P0709P2
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 650/225-1994
 TELEFAX: 650/952-9881

INFORMATION FOR SEQ ID NO: 22:

SEQUENCE CHARACTERISTICS:
 LENGTH: 454 amino acids
 TYPE: Amino Acid
 TOPOLOGY: Linear

US-07-934-373C-22

Query Match 37.4%; Score 1278.5; DB 2; Length 454;
 Best Local Similarity 48.5%; Pred. No. 8.1e-95;
 Matches 293; Conservative 32; Mismatches 110; Indels 169; Gaps 15;

```

QY 30 LGKKDITVELTCTAQQKSIQF--HMKNSTQKILNGSGFLTK-GPSKLANDRAARRSL 86
DB 11 LVKPGASVKISKCTGTYFTETMTMQSHGKSLKEMVGGFPPKNGSSSHNRFPDKATL 70
QY 87 ---WDQGNFPLIKNLKIEDSDTYICEVEDOKEEVOLLVFGITANSPTHLLQ--GQSLTL 141
DB 71 AVDKSTAYMELRSLTSEDSGIYYC-----ARMRLNYGFDVRYFDMGAGTTV 120
QY 142 TLSPSPSSPSVQCSPPGKNIQGGKITLSVQLQLQSDGTWCTYLLQNKVFEKIDIVV 201
DB 121 TVSSASTKGPVSFPLAPSSKSTSG-TAALGCL----- 152
QY 202 LAFQKASSIVYKGEQYEFSPFLAFVTEKLTGSGELMWQABRASSSKSWITFDLKNKEV 261
DB 153 -----VKDYFPEPVTS-----INSGALTSG----- 173
QY 262 SVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTALAEATKGLHQEVNLVVMRAIQ 321
DB 174 -----VH-TFPAVL-QSSGLVSLSSVTVVPSSSLGQTVI----- 206
QY 322 LQKULTCEYWGPTSPKMLSLKLENKAKVSKREKPVWVNLNPEAGMOCCLSDSQVLLLE 381
DB 207 -----CNV-----NHRP----- 213
QY 382 SNIKVLPWTSFVPEPKSCDKHTCTPCPAPRLLGGPSVFLPPPKDITLMSRTPEVTCV 441
DB 214 SNTKV-----DKVVEKSCDKHTCTPCPAPRLLGGPSVFLPPPKDITLMSRTPEVTCV 269
QY 442 VVDVSHEDPEYKFMWYDGVENVNAKTKPREOYNSTYRVVSVLTVLHODMLNGKEYCK 501
DB 270 VVDVSHEDPEYKFMWYDGVENVNAKTKPREOYNSTYRVVSVLTVLHODMLNGKEYCK 329
QY 502 VSNKALPAPLEKTSKAKGQPREPQVYTLPPSRDELTKNQVSLTGLVKGFPSPDIAYWE 561
DB 330 VSNKALPAPLEKTSKAKGQPREPQVYTLPPSRDELTKNQVSLTGLVKGFPSPDIAYWE 389
QY 562 SNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRWQGNVPSGCVMHEALHNHYTOKSL 621
DB 390 SNGQPENNYKTPPVLDSDGSFPLYSKLTVDKSRWQGNVPSGCVMHEALHNHYTOKSL 449
QY 622 LSPG 625
DB 450 LSPG 453

```

RESULT 62
 US-08-437-642B-22
 ; Sequence 22, Application US/08437642B
 ; Patent No. 6054297

GENERAL INFORMATION:
 APPLICANT: Paul J. Carter
 APPLICANT: Leonard G. Presta
 TITLE OF INVENTION: Immunoglobulin Variants
 NUMBER OF SEQUENCES: 47
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Genentech, Inc.
 STREET: 1 DNA Way
 CITY: South San Francisco
 STATE: California
 COUNTRY: USA
 ZIP: 94080
 COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatIn (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/437,6428
FILING DATE: 09-May-1995
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/934373
FILING DATE: 21-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/146206
FILING DATE: 17-NOV-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/05126
FILING DATE: 15-JUN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/715272
FILING DATE: 14-JUN-1991
ATTORNEY/AGENT INFORMATION:
NAME: Lee, Wendy M.
REGISTRATION NUMBER: 40,378
REFERENCE/DOCKET NUMBER: P0709P2C1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-1994
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 454 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
US-08-437-6428-22

Query Match 37.4%; Score 1278.5; DB 3; Length 454;
Best Local Similarity 48.5%; Pred. No. 8.1e-95;

Matches 293; Conservative 32; Mismatches 110; Indels 169; Gaps 15;

30 LGKKGDVTELTCTASQKSIQF--HWKNSNOIKILGNQGSFLTK-GPSKLNDRADSRSL 86
11 LVKPAASVKISCKTSKGYTFTEYTHMMKQSHGKSLKEMIGFNPKNGGSSHNQRFMDKATL 70
87 ---WDQGNPLIINKLKIEDSDTYICEVEDQKEEVQLLVFGILTANSDTHLIQ--GQSILTL 141
71 AVDKSTAYMELRLSTEDSGIYYC-----ARMRLNMGFDVRYFDVWGAGTTV 120
142 TLESPPGSSPSVQCSRGNKNIQGGKTLVSQLELDSDGTCTCVLQNKQKVEFKIDIV 201
121 TVSSASTKGPVFPPLAESSKSTSGG-TAALGCL----- 152
202 LAFQASSIVYKKEGEQVEFPLAFTVEKLTGSGELMWQABRASSSKSWITFDLKNKEV 261
153 ---VKDYFPEPVTVS-----WNSGALTSG----- 173
262 SVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLALEAKTGKLGHOEVNLVVMRATQ 321
174 -----VH--TFPAVL--QSSGLVSLSSVVWVSSSLGTQYI----- 206
322 LQKNLTCEVWGPTSPKMLMSLKLKMKAKVSKREKPVWVNLPEAGMQLSDSGQVLE 381
207 -----CNV-----NHRP----- 213
382 SNIKVLPTWSPFVEBKSCDHTHTCPCPAPABELLGGSPVFLPPPKKDTLMTSRPEVTCV 441
214 SNTKV-----DKVVEKSCDKHTHTCPCPAPABELLGGSPVFLPPPKKDTLMTSRPEVTCV 269
442 VVDVSHEDPEVKFNYYVDGVEVHNAKTRREQYNSTYRVSVLTVLHQMMLNGKEYKCK 501
270 VVDVSHEDPEVKFNYYVDGVEVHNAKTRREQYNSTYRVSVLTVLHQMMLNGKEYKCK 329
502 VSNKALPAPIEKTISKAGQPREPOVYTLTPSRBDLTGNQVSLTCLVVGFPSPDIAVWME 561
330 VSNKALPAPIEKTISKAGQPREPOVYTLTPSRBEMTNQVSLTCLVVGFPSPDIAVWME 389

562 SNGQPENNYKTTPEVLDDSDGFFLYSKLTVDKSRMQGNVFGSCVMEALHNHYTKSLS 621
390 SNGQPENNYKTTPEVLDDSDGFFLYSKLTVDKSRMQGNVFGSCVMEALHNHYTKSLS 449
622 LSPG 625
450 LSPG 453

RESULT 63

US-08-146-206C-22
Sequence 22, Application US/08146206C
Patent No. 6407213
GENERAL INFORMATION:
APPLICANT: Carter, Paul J.
TITLE OF INVENTION: Method for Making Humanized Antibodies
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 1 DNA Way
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatIn (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/146,206C
FILING DATE: 17-No. 6407213-1993
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/715272
FILING DATE: 14-JUN-1991
ATTORNEY/AGENT INFORMATION:
NAME: Lee, Wendy M.
REGISTRATION NUMBER: P0709P1
REFERENCE/DOCKET NUMBER: P0709P1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-1994
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 454 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
US-08-146-206C-22

Query Match 37.4%; Score 1278.5; DB 4; Length 454;

Best Local Similarity 48.5%; Pred. No. 8.1e-95;

Matches 293; Conservative 32; Mismatches 110; Indels 169; Gaps 15;

30 LGKKGDVTELTCTASQKSIQF--HWKNSNOIKILGNQGSFLTK-GPSKLNDRADSRSL 86
11 LVKPAASVKISCKTSKGYTFTEYTHMMKQSHGKSLKEMIGFNPKNGGSSHNQRFMDKATL 70
87 ---WDQGNPLIINKLKIEDSDTYICEVEDQKEEVQLLVFGILTANSDTHLIQ--GQSILTL 141
71 AVDKSTAYMELRLSTEDSGIYYC-----ARMRLNMGFDVRYFDVWGAGTTV 120
142 TLESPPGSSPSVQCSRGNKNIQGGKTLVSQLELDSDGTCTCVLQNKQKVEFKIDIV 201
121 TVSSASTKGPVFPPLAESSKSTSGG-TAALGCL----- 152
202 LAFQASSIVYKKEGEQVEFPLAFTVEKLTGSGELMWQABRASSSKSWITFDLKNKEV 261
153 ---VKDYFPEPVTVS-----WNSGALTSG----- 173
262 SVKRVTDPKLQMGKKLPLHLTLPOALPOYAGSGNLTLALEAKTGKLGHOEVNLVVMRATQ 321


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APPLICATION NUMBER: 07/715272
FILING DATE: 14-JUN-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/05126
FILING DATE: 15-JUN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/934373
FILING DATE: 21-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME:
REGISTRATION NUMBER:
REFERENCE/DOCKET NUMBER: 709P2PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE:
TELEFAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 454 amino acids
TYPE: amino acid
TOPOLOGY: linear
PCT-US93-07832-22

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```

Query Match      37.4%; Score 1278.5; DB 5; Length 454;
Best Local Similarity 48.5%; Pred. No. 8,1e-95;
Matches 293; Conservative 32; Mismatches 110; Indels 169; Gaps 15;

QY 30 LGKKGDYVELCTAOKKSIQF--HWKNSNQIKILGNOSFLTK-GPSKLNDRADRSRL 86
DB 11 LVKPGASVKISCKTGYTFTETMTMMQSHGKSLFEMIGFPRKGGSHNRDFMDKATL 70
QY 87 ---WDQGNFPLIKNLKIEDSDTYICEVEDQEEVQLLVFGLTANSDFHLQ--GQS/LTL 141
DB 71 AVDKSTAYMELRSLTSEDGIIYC-----ARMRGLNYGFVDFVDFVWAGATG 120
QY 142 TLSPGSSPSVQCSPPKGNIOGCKTSLVSQLELDSDGTCTCTYLQNKVVEFKIDIV 201
DB 121 TVSSASTGKPSVFLPASPSTSGG-TAALGCL----- 152
QY 202 LAFQKASSIVYKKEGOVEFSPFLAFVTEKLTGSGELWMQARASSSKSWITFDLKNKEV 261
DB 153 -----VKDYPERVTVS-----WNSGALTSG----- 173
QY 262 SVKRVYTOPKLOMGKKLPLHLTLTLPQALPQYAGSGNLTLAEKTKGKHQEVNLVVMRATQ 321
DB 174 -----VH--TFPAVL--QSSGLYSLSSVVTVVPSSSLGTQTYI----- 206
QY 322 LQKNLTCEVWGPTSPKMLSLKLENKEAKVSKREKPVWVNLPEAGMQCLLSDSQVLE 381
DB 207 -----CNV-----NHRP----- 213
QY 382 SNIKVLPYMSRPEVBEKSCDKTHTCPCPAPPELLGGPSVFLFPPPKDITLMIKSRPEVTCV 441
DB 214 SNTKV-----DKYVERKSCDKTHTCPCPAPPELLGGPSVFLFPPPKDITLMIKSRPEVTCV 269
QY 442 VDVSHEDPEVKFNMYVDGVEVNAKTKPREQYNSTYRVVSVLTTLHQMILNGKEYKCK 501
DB 270 VVDVSHEDPEVKFNMYVDGVEVNAKTKPREQYNSTYRVVSVLTTLHQMILNGKEYKCK 329
QY 502 VSNKLPAPRIEKTISKAKGQPREPOVYTLPPSRDLTKNOVSLTLVYGFPYPSDIAVWE 561
DB 330 VSNKLPAPRIEKTISKAKGQPREPOVYTLPPSRDLTKNOVSLTLVYGFPYPSDIAVWE 389
QY 562 SNGQENNNYKTPPVLDSDGSFFLYSKLTVDSKRMQOGNVPSCSVMEHALNHNHYTQKSL 621
DB 330 SNGQENNNYKTPPVLDSDGSFFLYSKLTVDSKRMQOGNVPSCSVMEHALNHNHYTQKSL 449
QY 622 LSPG 625
DB 450 LSPG 453

```

RESULT 66

```

US-09-049-672A-4
Sequence 4, Application US/09049672A
Patent No. 6135941
GENERAL INFORMATION:
APPLICANT: Hillman, Jennifer L.
APPLICANT: Lal, Preeti
APPLICANT: Tang, Y. Tom
APPLICANT: Yue, Henry
APPLICANT: Au-Young, Janice
APPLICANT: Corley, Neil C.
APPLICANT: Guegler, Karl J.
APPLICANT: Baughn, Marian R.
TITLE OF INVENTION: HUMAN IMMUNE SYSTEM ASSOCIATED PROTEINS
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/049,672A
FILING DATE: HERewith
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Cerrone, Michael C
REGISTRATION NUMBER: 39,132
REFERENCE/DOCKET NUMBER: PP-0497 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
TELEFAX: 650-845-4166
TELEX:
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 473 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: PANTCUT01
CLONE: 1513264
US-09-049-672A-4

Query Match      37.4%; Score 1277.5; DB 3; Length 473;
Best Local Similarity 46.9%; Pred. No. 1e-94;
Matches 296; Conservative 37; Mismatches 125; Indels 173; Gaps 15;

QY 8 RHLLVLIQLALP-----AATQGNKVVLGKKGDVEIETCTAS--OKKSIOFMKNSNOI 59
DB 2 KHLWFFLLVAAPRWLVLSQVQLQESGPGIVKPSSTLTLTCAVSGSITSGGYVSWIRQP 61
QY 60 KIILNQ--GSFLTGPSPKLNDRADRSRL---WDQGNFPLIKNLKIEDSDTYICEVEDQ 114
DB 62 PGKLEWIGIYVYSGSTLYNPISLRSVITISVTSKNQFSILKLSVTAADTVAVVYCARD- 120
QY 115 KEVQLLVFGLTANSDFHLQGGSLTLTLSPSSSPSVQCRSPRGKNIQSGKTLVSQ 174
DB 121 -----VGLRGANVGMWGGSTLVTSASATGSPVFLPASPSTSGG-TAALGCL 171
QY 175 ELQDGTWCTCTVLQNKVVEFKIDIVLAFQKASSIYVYKKEGOVEFSPFLAFVTEKLTG 234
DB 172 -----VKDYPERVTVS----- 183
QY 235 SGELWMQARASSSKSWITFDLKNKEVSVKRVYTOPKLOMGKKLPLHLTLTLPQALPQYAGS 294

```


SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/470,299
FILING DATE: 06-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Sutton, Jeffrey A.
REGISTRATION NUMBER: 34,028
REFERENCE/DOCKET NUMBER: P31005C3
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-270-5024
TELEFAX: 610-270-5090
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 387 amino acids
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
US-08-470-299-4

Query Match 37.4%; Score 1275.5; DB 1; Length 387;
Best Local Similarity 85.2%; Pred. No. 1,1e-94;
Matches 241; Conservative 13; Mismatches 18; Indels 11; Gaps 2;

QY 351 VSRKRPVWVLPNPEAGMMQCLLSDSGQVLLSNIKVLPT-----WSTPYEPKSCDKT 402
DB 107 LKRLDRNLIMGL---AGLNSCPYKEANQSTLENFLERLKTIMREKDSKSSGTEPKSADKT 163
QY 403 HTCPCPAPPELLGSGSVLFPPPKPDITLMISTPEVTCVVDVSHEDDEVKKNWVVDGVE 462
DB 164 HTCPCPAPPELLGSGSVLFPPPKPDITLMISTPEVTCVVDVSHEDDEVKKNWVVDGVE 223
QY 463 VHNATKREEOYNSTYRVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGP 522
DB 224 VHNATKREEOYNSTYRVSVLTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGP 283
QY 523 REPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNQGPENNYKTTTPVLDSDGS 582
DB 284 REPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNQGPENNYKTTTPVLDSDGS 343
QY 583 PFLYSKLTVDKSRMOQGNVFCSSVMHEALHNHYTQKSLSLSPG 625
DB 344 PFLYSKLTVDKSRMOQGNVFCSSVMHEALHNHYTQKSLSLSPG 386

RESULT 70
US-09-301-593-18
Sequence 18, Application US/09301593A
GENERAL INFORMATION:
APPLICANT: Park, John E.
APPLICANT: Garin-Chesa, Pilar
APPLICANT: Bamberger, Uwe
APPLICANT: Leger, Olivier
APPLICANT: Saldanha, Jose W.
APPLICANT: Rettig, Wolfgang J.
TITLE OF INVENTION: FAP-specific Antibody with Improved Productibility
FILE REFERENCE: 0652,1890001
CURRENT APPLICATION NUMBER: US/09/301,593A
CURRENT FILING DATE: 1999-04-29
EARLIER APPLICATION NUMBER: EP 98107925.4
EARLIER FILING DATE: 1998-04-30
EARLIER APPLICATION NUMBER: US 60/086,049
EARLIER FILING DATE: 1998-05-18
NUMBER OF SEQ ID NOS: 108
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 18
LENGTH: 453
TYPE: PRT
ORGANISM: Homo sapiens
US-09-301-593-18

Query Match 37.4%; Score 1275.5; DB 4; Length 453;

Best Local Similarity 47.8%; Pred. No. 1.4e-94;
Matches 289; Conservative 39; Mismatches 107; Indels 169; Gaps 16;

QY 30 LGKKGDTVELTCTASQKSIQF--HMKSNQIKILNGQSGF-LTKGPSKLNDRADSRSL 86
DB 10 LVKPGASVMSCKTSRTFTFTYTHWYRQSHGKLEWIGGINPNNGIPNTYQKRGKRAITL 69
QY 87 W---DQGNFLLINKLKIEDSDIYICEVEDQKEEVQLLVFGLTANSPTHLLQ--GQSLTL 141
DB 70 TVGSSSTAYWEIARLSLSEDAVYFC-----ARRIANGY--DEGHADWQGGHNV 119
QY 142 TLESPPGSSPSVQCRSRGKRIQGGKTLVSQLELDQSGITCTIVLQNKVKEKIDIV 201
DB 120 TVSSASTGSPSVFPLADSSKSTSG-TPAALGCL----- 151
QY 202 LAFQKASSIVYKKGQEVSEFPFLAFVTEKLTGSGELMQRASSKSWITFDLKNKEV 261
DB 152 -----VKDYFPEPVTVS-----MNSGALTSC----- 172
QY 262 SVKRVTDPKLQMGKULPLHLTPQALPOYAGSGLTLALEAKTGKLGQEVNLVWMEATQ 321
DB 173 -----VH-TFPAVL-QSGGLVSLSSVTVPPSSISGTQTYI----- 205
QY 322 LQKNLTCEWGPSTSPKMLSLKENKAKVSKREKPVWVLPNPEAGMMQCLLSDSGQVLL 381
DB 206 -----GNV-----NHKP----- 212
QY 382 SNIKVLPWTSNPVPEKSCDKTHTCPCPAPPELLGSGSVLFPPPKDITLMISTPEVTCV 441
DB 213 SNTKY---DKVPEKSCDKTHTCPCPAPPELLGSGSVLFPPPKDITLMISTPEVTCV 268
QY 442 VVDVSHEDPEVKFMVYDGVGVHNAKTPREEOYNSTYRVSVLTVLHODMLNGEKYCK 501
DB 269 VVDVSHEDPEVKFMVYDGVGVHNAKTPREEOYNSTYRVSVLTVLHODMLNGEKYCK 328
QY 502 VSNKALPAPIEKTISKAKGPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEME 561
DB 329 VSNKALPAPIEKTISKAKGPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEME 388
QY 562 SNGQPNNYKTTTPVLDSDGSFFLYSKLTVDKSRMOQGNVFCSSVMHEALHNHYTQKSLS 621
DB 389 SNGQPNNYKTTTPVLDSDGSFFLYSKLTVDKSRMOQGNVFCSSVMHEALHNHYTQKSLS 448
QY 622 LSPG 625
DB 449 LSPG 452

RESULT 71
US-09-740-002-25
Sequence 25, Application US/09740002
Patent No. 6537809
GENERAL INFORMATION:
APPLICANT: BRAMS, PETER
APPLICANT: MORROW, PHILLIP
TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES
TITLE OF INVENTION: SPECIFIC TO RSV F-PROTEIN AND METHODS FOR THEIR
TITLE OF INVENTION: MANUFACTURE AND THERAPEUTIC USE THEREOF
FILE REFERENCE: 037003-0275759
CURRENT APPLICATION NUMBER: US/09/740,002
CURRENT FILING DATE: 2000-12-20
PRIOR APPLICATION NUMBER: 09/335,697
PRIOR FILING DATE: 1999-06-18
PRIOR APPLICATION NUMBER: 08/488,376
PRIOR FILING DATE: 1995-06-07
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 25
LENGTH: 475
TYPE: PRT
ORGANISM: Homo sapiens
US-09-740-002-25

```

Query Match      37.4%; Score 1275.5; DB 4; Length 475;
Best Local Similarity 46.8%; Pred. No. 1.5e-94;
Matches 298; Conservative 35; Mismatches 111; Indels 193; Gaps 16;

QY 10 LLLVLLALLPALTQGNKVVLGKKGVLTCTTAS-----QKSIQFPHMK 54
DB 10 LVAVATRVLSQVQLQSSGPVAVKPTETLTCTVSGFSLNPMGVATWIRQPGKALEV- 68
QY 55 NSNQIKILGN-----QGSFLTQGPSKLNDRADSRSLMDQGNPPLIIKULKIEDSDTYIC 109
DB 69 -----LGNISSEDSKSPSLSKSLRTTSQDTSRS-----QVLSLTWVDPVDTATATYC 116
QY 110 EVEDQKEEVQVLVFGLTANSDFHL-LQGSLLTLTLSPGSSPSVOCSPRGKNIQSGKT 168
DB 117 -----ARVGLYDINAYVLYLDYWGQGLTAVTSASATKGSVPLPSSSTSGG-T 167
QY 169 LSVQLELDQSDGWTCTVQLNQKKEFKIDIVLAFQKASSIYKKEGGEVPSPLAFT 228
DB 168 AALGCL-----VXQYFPEPYT 183
QY 229 VEKLTGSGELMWOERASSSKSWITFDLKNKEVSVKRVYQDPKLGKGLPLHLTLPOAL 288
DB 184 VS-----WNSGALTSG-----VH-TTPAVL 202
QY 289 PQVAGSGNITLALAEATGKLEHENVLMRATOLQKLTCEVWGPTSPKMLSLKLENKE 348
DB 203 -QSSGLYLSLVTVTPSSSLGTQTYI-----CNV----- 230
QY 349 AKVSKREKPVWLVNPPAGMOCILSDSGOVLLESNIKVLPTMSTPYEPKSCDKHTTCTPC 408
DB 231 -----NHKP-----SNTKV-----DKKAEPPKSCDKHTCTPC 257
QY 409 PABELLGSPSVFLFPPPKDPTLMISRTPEYTCVVVSVSHEDPEVKRMVVDGVEVNAKT 468
DB 258 PABELLGSPSVFLFPPPKDPTLMISRTPEYTCVVVSHEDPEVKRMVVDGVEVNAKT 317
QY 469 KPREEQNSTYRVVSVLVTLHODMLNGKEYKCYSNKALPAPIEKTISKAGQPREQVY 528
DB 318 KPREEQNSTYRVVSVLVTLHODMLNGKEYKCYSNKALPAPIEKTISKAGQPREQVY 377
QY 529 TLPPSDELTKNOVSLTCLVKGFPSPDIAVEMESNQEPENNYKTPPVLDSDGFFLYSK 588
DB 378 TLPPSDELTKNOVSLTCLVKGFPSPDIAVEMESNQEPENNYKTPPVLDSDGFFLYSK 437
QY 589 LTVDKSRMOQGNVFCSCVMHEALHNHYTKSLSLSPG 625
DB 438 LTVDKSRMOQGNVFCSCVMHEALHNHYTKSLSLSPG 474

RESULT 72
US-08-472-888A-7
; Sequence 7, Application US/08472888A
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; APPLICANT: Maiz, Gerald
; TITLE OF INVENTION: ACP-ANTIBODY FUSION PROTEINS
; TITLE OF INVENTION: AND RELATED MOLECULES AND METHODS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elding LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: IBM Compatible
; SOFTWARE: FASTSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472,888A

```

```

; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/618,314
; FILING DATE: 23-NOV-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: Elding, Karen L
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/258001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
; TELEX:
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 442 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-472-888A-7

Query Match      37.3%; Score 1275; DB 4; Length 442;
Best Local Similarity 93.3%; Pred. No. 1.5e-94;
Matches 218; Conservative 3; Mismatches 14; Indels 0; Gaps 0;

QY 371 LLSDSGOVLLESNIKVLPTMSTPYEPKSCDKHTTCTPCPAPALLGSPVFLFPPPKDPTL 430
DB 187 VLGSSGLVLSLVTVTPSSSDKRVKPCDKHTTCTPCPAPALLGSPVFLFPPPKDPTL 246
QY 431 MISRTPEYTCVVVDVSHEDPEVKFMVYDGVVHNAKTRPREQNSTYRVVSVTLVHQ 490
DB 247 MISRTPEYTCVVVDVSHEDPEVKFMVYDGVVHNAKTRPREQNSTYRVVSVTLVHQ 306
QY 491 DMLNGKEYKCYSNKALPAPIEKTISKAGQPREQVYTLPPSRDELTKNOVSLTCLVKG 550
DB 307 DMLNGKEYKCYSNKALPAPIEKTISKAGQPREQVYTLPPSRDELTKNOVSLTCLVKG 366
QY 551 FPPSDIAVEMESNQEPENNYKTPPVLDSDGFFLYSKLTVDKSRMOQGNVFCSCVMHEA 610
DB 367 FPPSDIAVEMESNQEPENNYKTPPVLDSDGFFLYSKLTVDKSRMOQGNVFCSCVMHEA 426
QY 611 LHNHYTKSLSLSPG 625
DB 427 LHNHYTKSLSLSPG 441

RESULT 73
PCT-US96-10043-9
; Sequence 9, Application PC/TUS9610043
; GENERAL INFORMATION:
; APPLICANT: The General Hospital Corporation
; TITLE OF INVENTION: P-SELECTIN LIGANDS AND RELATED MOLECULES
; TITLE OF INVENTION: AND METHODS
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02210-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US96/10043
; APPLICATION NUMBER: US 60/000,213

```

FILING DATE: 14-JUN-1995
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Lech, Karen F.
REGISTRATION NUMBER:
REFERENCE/DOCKET NUMBER: 00786/284001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/542-5070
TELEFAX: 617/542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 442 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: linear
MOLECULE TYPE: protein
PCT-US96-10043-9

Query Match 37.3%; Score 1275; DB 5; Length 442;
Best Local Similarity 93.3%; Pred. No. 1.5e-94;
Matches 238; Conservative 3; Mismatches 14; Indels 0; Gaps 0;

QY 371 LLSDSGVLLSEINIKVLPWSTPVEPKSCDKTHTCPCPAPELLGGPSVFLPPPKXDTL 430
DB 187 VLQSGVLSVSVTPSSSDKVEPKSCDKTHTCPCPAPELLGGPSVFLPPPKXDTL 246
QY 431 MISRPETVCVVVDVSHEDPEVKFNNVYDQGVFNHAKTKPREEQNSTYRVSVLTIVHQ 490
DB 247 MISRPETVCVVVDVSHEDPEVKFNNVYDQGVFNHAKTKPREEQNSTYRVSVLTIVHQ 306
QY 491 DLNKEKYEKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKG 550
DB 307 DLNKEKYEKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKG 366
QY 551 FVPSDIAVEMESNGQPENNYKTTPVLDSGSPFLYSKLTVDKSRMQQGNVFSCSVMHEA 610
DB 367 FVPSDIAVEMESNGQPENNYKTTPVLDSGSPFLYSKLTVDKSRMQQGNVFSCSVMHEA 426
QY 611 LHNHTYOKSLSPG 625
DB 427 LHNHTYOKSLSPG 441

RESULT 74

US-09-740-002-27
Sequence 27, Application US/09740002
Patent No. 6537809
GENERAL INFORMATION:
APPLICANT: BRAMS, PETER
APPLICANT: MORROW, PHILLIP
TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES
TITLE OF INVENTION: SPECIFIC TO RSV F-PROTEIN AND METHODS FOR THEIR
FILE REFERENCE: 037003-0275759
CURRENT APPLICATION NUMBER: US/09/740,002
CURRENT FILING DATE: 2000-12-20
PRIOR APPLICATION NUMBER: 09/335,697
PRIOR FILING DATE: 1999-06-18
PRIOR APPLICATION NUMBER: 08/488,376
PRIOR FILING DATE: 1995-06-07
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 27
LENGTH: 475
TYPE: PRT
ORGANISM: Homo sapiens
US-09-740-002-27

Query Match 37.3%; Score 1272.5; DB 4; Length 475;
Best Local Similarity 46.2%; Pred. No. 2.6e-94;
Matches 295; Conservative 31; Mismatches 116; Indels 197; Gaps 15;

QY 10 LLLVLQALLPAATQGNKVVYLGKKGDIVELCTASQKRSIQFHWKNSNQIKLQNGSFL 69
DB 10 LVAATATVLSQVQGESGPAIVKPTQTLTCTPS-----GFSLSIRGMSVWMI 58
QY 70 TKGPSKIND---RADSRSLMDQGNF-----PLIIKLIKESDPT 106
DB 59 RQPGKALEWLARID-----WDDDTFYSASLKTRLSISKOTSKNQVLRMTNVPVJTAT 113
QY 107 YICEVEDQKEEVQVLVFGLTANSPTHLLOGQSLTTLTSPGSSPSVQCSFRKNIQGG 166
DB 114 YFCARASLYSDSYFL-----YHAYWGQGVVTVSSASTKPSVFLAPSSKTSIGG 166
QY 167 KTLVSQLELDQSGTWTCTVLQNOQKVEFKIDIVLAFORASSIVYKKEGEQVFSFPLA 226
DB 167 -TALGCL-----VDYFPEP 181
QY 227 FTVEKLTGSGELMWQARASSSKSWITFDLKNKEVSKRVYTDPKLQMGKPLPLHLTPQ 286
DB 182 VTVS-----WNSGALTSG-----VH-TFPA 200
QY 287 ALPGVAGSNLTLLAEKTKGLHQEVNLVVMBATQQLNLTCVWGPTSPRLMLSLKLEN 346
DB 201 VL-QSSGLVLSVTVTPSSSLGTQTYI-----CNV----- 230
QY 347 KEAKYSREKRPVWVLNPEAGWQCLSDSGVLLSEINIKVLPWSTPVEPKSCDKTHTCP 406
DB 231 -----NHKP-----SNTKV-----DKAEPKSCDKTHTCP 255
QY 407 PCPAPELLGGPSVFLPPPKXDTLMISRTPEVTCVVVDVSHEDPEVKFNNVYDQGVFNH 466
DB 256 PCPAPELLGGPSVFLPPPKXDTLMISRTPEVTCVVVDVSHEDPEVKFNNVYDQGVFNH 315
QY 467 KTRPREQVNSTYRVSVLTIVLHODMLNGKEYCKVSNKALPAPIEKTISKAKGQPREPO 526
DB 316 KTRPREQVNSTYRVSVLTIVLHODMLNGKEYCKVSNKALPAPIEKTISKAKGQPREPO 375
QY 527 VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTPVLDSGSPFLY 586
DB 376 VYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTPVLDSGSPFLY 435
QY 587 SKLTVDKSRMQQGNVFSCSVMHEALHNHTYOKSLSPG 625
DB 436 SKLTVDKSRMQQGNVFSCSVMHEALHNHTYOKSLSPG 474

RESULT 75

US-08-227-496C-15
Sequence 15, Application US/08227496C
Patent No. 6130202
GENERAL INFORMATION:
APPLICANT: Greve, Jeffrey M.
APPLICANT: McClelland, Alan
TITLE OF INVENTION: Multimeric Forms of Human
TITLE OF INVENTION: Rhinovirus Receptor Protein
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bayer Corporation
STREET: 400 Morgan Lane
CITY: West Haven
STATE: Connecticut
COUNTRY: USA
ZIP: 06516
COMPUTER READABLE FORM:
MEDIUM TYPE: diskette, 1.44 mb storage
COMPUTER: Dell Optiplex GX1
OPERATING SYSTEM: Windows 95
SOFTWARE: Wordperfect 8.0 for Windows
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/227,496C
FILING DATE: 04/14/94
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/903,069

/ FILING DATE: 06/22/92
/ APPLICATION NUMBER: 07/704,984
/ FILING DATE: 05/24/91
/ APPLICATION NUMBER: 07/556,238
/ FILING DATE: 07/20/90
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Barbara A. Shlme2
/ REGISTRATION NUMBER: 29,862
/ REFERENCE/DOCKET NUMBER: MTI 214.2C
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (203) 812-2786
/ TELEFAX: (203) 812-5492
/ INFORMATION FOR SEQ ID NO: 15:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 680 amino acid residues
/ TYPE: amino acids
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ DESCRIPTION: no
/ HYPOTHEICAL: no
/ FRAGMENT TYPE: complete sequence
/ FEATURE:
/ NAME/KEY: t1CAM(185)/19G fusion protein
/ OTHER INFORMATION: amino acid residues 1-453 =
/ OTHER INFORMATION: t1CAM(453); amino acid residues 454-680 = amino
/ OTHER INFORMATION: acid residues 216-442 of human Ig1 heavy chain
US-08-227-496C-15

Query Match 37.3%; Score 1272.5; DB 3; Length 680;
Best Local Similarity 51.9%; Pred. No. 4,4e-94;
Matches 290; Conservative 44; Mismatches 114; Indels 111; Gaps 17;
QY 99 LKIEDSDTYICEVDQKEEVQVLVFGI--TANSDTLLQGSQTLTLSPSSPSVQCR 156
DB 200 LEVDYTGCTVCSID-----GLFVSEAVHIALGDRLL-----NPTV--- 236
QY 157 SPRGNKIOGGKTLVSLELDQSGT--WTCTVLQNKQVEFKIDIVLAFOKASSIVYKK 214
DB 237 -TYGNDTSFSAKA-SVS-VTAEDGTQRLTCVAILNGSQETLQTVIYSPFANVILTRP 293
QY 215 EGEQVEFSPFLATTEVKTGSGELMWOAERASSKSWITFDLKNKESYK-----RYT 267
DB 294 EVSE-----GTEVTVCSEAHPRAKYT 314
QY 268 QD--PKLQMGKKLRLHLTPQALPOYAG--SGNLTLALEAKTKGKHQEVNIVVMARQL 322
DB 315 LNVGPAPQISPPAQL--LTKATPEONGSFCSCATLEVAGQILHNQVRELKVLGPRLL 371
QY 323 -----QKNLTCEVWGTPSPKLMLSLKLLENKEAVSKREKRPVWVLNPEAGM 367
DB 372 DERDPCGNMTWPNESQOTPCWQMGNPLBELK-CLNDGTFPLPIG---ESVTVTRDLBGT 427
QY 368 WQC-LISDSGQVLLBSNIKVLPWSTPVEBKSCDKTHTCPCPAPELLGSPVFLPPKP 426
DB 428 YLCRASTQGEVTRKTVNVL-----SPRYEDKTHTCPCPAPELLGSPVFLPPKP 480
QY 427 KDTLMSRPEVYCVVVDVSHEDPEVKFMVYDGVVHNAKTRPEEQVNSTTRVSVLT 486
DB 481 KDTLMSRPEVYCVVVDVSHEDPEVKFMVYDGVVHNAKTRPEEQVNSTTRVSVLT 540
QY 487 VLIHQDLNGKEYCKVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRBELTNGQVSLTC 546
DB 541 VLIHQDLNGKEYCKVSNKALPAPIEKTSKAKGQPREPOVYTLPPSRBELTNGQVSLTC 600
QY 547 LVKGFPSPDIAYWESNGQPENNYKTPPVLDSDGSFFLYSKULTVDKSMQOGNVFSCGV 606
DB 601 LVKGFPSPDIAYWESNGQPENNYKTPPVLDSDGSFFLYSKULTVDKSMQOGNVFSCGV 660
QY 607 MHEALNNHYTKQSLSLSPG 625
DB 661 MHEALNNHYTKQSLSLSPG 679

RESULT 76
US-08-487-550-12
/ Sequence 12, Application US/08487550
/ Patent No 6113898
/ GENERAL INFORMATION:
/ APPLICANT: Anderson, Darrell R.
/ TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
/ TO HUMAN B7.1 AND/OR B7.2 PRIAMIZED FORMS THEREOF,
/ TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
/ NUMBER OF SEQUENCES: 12
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
/ STREET: 699 Prince Street
/ CITY: Alexandria
/ STATE: VA
/ COUNTRY: USA
/ ZIP: 22314
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patentin Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/487,550
/ FILING DATE: 07-JUN-1995
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Teskin, Robin L.
/ REGISTRATION NUMBER: 35,030
/ REFERENCE/DOCKET NUMBER: 012712-131
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 703-836-6620
/ TELEFAX: 703-836-2021
/ INFORMATION FOR SEQ ID NO: 12:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 476 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
US-08-487-550-12
Query Match 37.2%; Score 1270; DB 3; Length 476;
Best Local Similarity 54.6%; Pred. No. 4,2e-94;
Matches 281; Conservative 31; Mismatches 86; Indels 117; Gaps 14;
QY 171 VSQLELDQSG-----TWCTVLQNKQVEFKIDIVLAFOKASSIVYKKEQVE 220
DB 18 ISQVQLQESGGPGLVAPKSETLSLTCAV-----SGGSIS 49
QY 221 EEPFLATFYEKLTGSGELMWOAERASSKSWITFDLKNKESYKRVYQDPKLOMGKKLRL 280
DB 50 GGYGNGW-IRPPGKGLWIGSFYSSGNTYVPSLKS-QVYIS--TTSKNQFSLKL-- 103
QY 281 HLTLPOALPOYAGSNLTLEA---KTKGKHQEVNIVVMARQLOKNTLGEVWGP--- 333
DB 104 -----NSMTAALDPAVYVCYRDLRFVGVGVY-----NNMFVWGVGRVLT 141
QY 334 -----TSPKLMLSLKLLENKEAVSKR-----EKPVV-----INPEAGMQC 370
DB 142 VTVSSASTGSPVFLPAPSSKSTSGTAALGLVYDPEPEPTVSMNGALTSVGHTRPA 201
QY 371 LISDSGQVLLBSN-----NIKLPWSTPVP---EPKSCDKTHTCPCPAPA 410
DB 202 VLISSGGLVSLSSVTVTPSSISLQTYIGNVHNKPS-NTKVDKAPKSCDKTHTCPCPAPA 260
QY 411 PELLGSPVFLPPPKDTLMSRPEVYCVVVDVSHEDPEVKFMVYDGVVHNAKTRP 470
DB 261 PELLGSPVFLPPPKDTLMSRPEVYCVVVDVSHEDPEVKFMVYDGVVHNAKTRP 320
QY 471 REEQVNSTTRVSVLTVLVLIHQDLNGKEYCKVSNKALPAPIEKTSKAKGQPREPOVYTL 530
DB 321 REEQVNSTTRVSVLTVLVLIHQDLNGKEYCKVSNKALPAPIEKTSKAKGQPREPOVYTL 380

QY 531 PPSRDELTKNOVSLTCLVKGFPYSDIAVWESNQGPPENNYKTTTPVLDSGSPFLYSKLT 590
 DB 381 PPSRDELTKNOVSLTCLVKGFPYSDIAVWESNQGPPENNYKTTTPVLDSGSPFLYSKLT 440
 QY 591 VDKSRMOQGNVFCSCVMHEALHNHYTKSLSPG 625
 DB 441 VDKSRMOQGNVFCSCVMHEALHNHYTKSLSPG 475

RESULT 77

US-09-526-098-12
 ; Sequence 12, Application US/09526098
 ; Patent No. 6492134
 ; GENERAL INFORMATION:
 ; APPLICANT: Anderson, Darrell R.
 ; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
 ; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF,
 ; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
 ; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"
 ; NUMBER OF SEQUENCES: 12
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: BURNS, DONNE, SWECKER & MATHIS
 ; STREET: 699 Prince Street
 ; CITY: Alexandria
 ; STATE: VA
 ; COUNTRY: USA
 ; ZIP: 22314
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentin Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/526,098
 ; FILING DATE:
 ; CLASSIFICATION:
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 09/383,916
 ; FILING DATE:
 ; APPLICATION NUMBER: US 08/487,550
 ; FILING DATE: 07-JUN-1995
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Teskin, Robin L.
 ; REGISTRATION NUMBER: 35,030
 ; REFERENCE/DOCKET NUMBER: 012712-131
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 703-836-6620
 ; TELEFAX: 703-836-2021
 ; INFORMATION FOR SEQ ID NO: 12:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 476 amino acids
 ; TYPE: amino acid
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: protein
 ; US-09-526-098-12

Query Match 37.2%; Score 1270; DB 4; Length 476;

Best Local Similarity 54.6%; Pred. No. 4, 2e-94;

Matches 281; Conservative 31; Mismatches 86; Indels 117; Gaps 14;

QY 171 VSQLELDPSG-----TWCTVLQNOKKVEFKIDIVLAFQKASSIYKKEGEQVE 220
 DB 18 LSQVQLQSSGGFGLVAPSETLSITCAV-----SGGIS 49
 QY 221 FSPFLAFTVEKLTGSGELMWAERASSSKSWITFDLKNKEVSVKRVTDPKLQMGKLP 280
 DB 50 GGYGGMV-IRQPPGKGLWIGSFSSGNTYNPGLKS-QVTIS--TDTSKNQFSLKL-- 103
 QY 281 HLTLPQALPQVAGSGNLTALAE---KTGKLHDEVNLVWRAIQLQKMLCEVWGP-- 333
 DB 104 -----NSMTAADTAAYVYCVARDLRFVVGMY-----NMFDVWGPVL 141

QY 334 -----TSPKMLSLKLENKEAKVSKR-----EKPVWV-----LNPAQNMOC 370
 DB 142 VTWSSASTKQPSVFLPAPSSKSTSGTAALGCLVKQYFPEPVYTSNMSGALTSVTHFEPA 201
 QY 371 LLSDSQVLLS-----NIKVLPTWSTPV-----EPSCDKTHICPCPA 410
 DB 202 VLQSSGLYSLSSTVTVBSSLSGTQTYICNVNHRK--NTKVDKAKAPKSCKTHCPCPA 260
 QY 411 PELGSPVFLFPKPKDQTLMTISRTPEVTCVVVDVSHEDPEVKFMVYVDGVEVNAKTKP 470
 DB 261 PELGSPVFLFPKPKDQTLMTISRTPEVTCVVVDVSHEDPEVKFMVYVDGVEVNAKTKP 320
 QY 471 REQYNSTYRVSVLTVLHQMNGEKYKCKVSKNALPAIEKTISSAKQPREPOVYTL 530
 DB 321 REQYNSTYRVSVLTVLHQMNGEKYKCKVSKNALPAIEKTISSAKQPREPOVYTL 380
 QY 531 PPSRDELTKNOVSLTCLVKGFPYSDIAVWESNQGPPENNYKTTTPVLDSGSPFLYSKLT 590
 DB 381 PPSRDELTKNOVSLTCLVKGFPYSDIAVWESNQGPPENNYKTTTPVLDSGSPFLYSKLT 440
 QY 591 VDKSRMOQGNVFCSCVMHEALHNHYTKSLSPG 625
 DB 441 VDKSRMOQGNVFCSCVMHEALHNHYTKSLSPG 475

RESULT 78

US-09-499-846-12
 ; Sequence 12, Application US/09499846
 ; Patent No. 6656728
 ; GENERAL INFORMATION:
 ; APPLICANT: Kavanaugh et al.
 ; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
 ; TITLE OF INVENTION: RECEPTOR-IMMUNOGLOBULIN FUSION
 ; FILE REFERENCE: 035784/195012 (5784-
 ; CURRENT APPLICATION NUMBER: US/09/499,846
 ; NUMBER OF SEQ ID NOS: 12
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 12
 ; LENGTH: 488
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-09-499-846-12

Query Match 37.2%; Score 1270; DB 4; Length 488;

Best Local Similarity 69.2%; Pred. No. 4, 3e-94;

Matches 256; Conservative 22; Mismatches 55; Indels 37; Gaps 6;

QY 293 GSGNLTALBAKTKGLHQ---EVLVWRAIQLQKML--TCEVWGPTSPKMLSLKLE-- 345
 DB 118 GSINHTYQLDIVERSPHRPILQGLPANKTVVAGSNVEFMCKVYSDQPHIQLKHIEVN 177
 QY 346 -----NKEAKVSKREKPVWLN-----PEAGMOCLSDS-----GQ 377
 DB 178 GSKIGDNLPPVQILKTAGVNTTDKEMEVHLNRVSEDEAGBYTCLAGNSIGLSHSAWL 237
 QY 378 VLESNIKVLPTWSTP--VEPKSCDKTHICTCPAPELGSPSVFLFPKPKDQTLMTISRT 435
 DB 238 TVEALERPAVMTSPYLLEPKSCDKTHICTCPAPELGSPSVFLFPKPKDQTLMTISRT 297
 QY 436 PEVTCVVVDVSHEDPEVKFMVYVDGVEVNAKTKPREQYNSTYRVSVLTVLHQMNG 495
 DB 298 PEVTCVVVDVSHEDPEVKFMVYVDGVEVNAKTKPREQYNSTYRVSVLTVLHQMNG 357
 QY 496 KEYKCKVSKNALPAIEKTISSAKQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPYSD 555
 DB 358 KEYKCKVSKNALPAIEKTISSAKQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPYSD 417
 QY 556 IAVWESNQGPPENNYKTTTPVLDSGSPFLYSKLTVDKSRMOQGNVFCSCVMHEALHNHY 615
 DB 418 IAVWESNQGPPENNYKTTTPVLDSGSPFLYSKLTVDKSRMOQGNVFCSCVMHEALHNHY 477
 QY 616 TOKSLSPG 625

Db 478 TOKSLSPG 487

```
RESULT 79
US-08-784-512-3
; Sequence 3, Application US/08784512
; Patent No. 5872209
; GENERAL INFORMATION:
; APPLICANT: BARTNIK, Eckart
; APPLICANT: EIDENMUELLER, Bernd
; APPLICANT: BUETNER, Frank
; APPLICANT: CATERSON, Bruce
; APPLICANT: HUGHES, Clare
; TITLE OF INVENTION: An artificial recombinant substrate (RAGG 1)
; TITLE OF INVENTION: and native aggregan to study the proteolytic activity of
; TITLE OF INVENTION: "Aggreganase" in cell culture systems
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Foley & Lardner
; STREET: Suite 500, 3000 K Street, N.W.
; CITY: Washington, D.C.
; COUNTRY: USA
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/784,512
; FILING DATE: 17-JAN-1997
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: EP 96100682.2
; FILING DATE: 18-JAN-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: GRANADOS, Patricia D.
; REGISTRATION NUMBER: 33,683
; REFERENCE/DOCKET NUMBER: 18748/311
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 672-5300
; TELEFAX: (202) 672-5399
; TELEX: 904136
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 396 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..396
US-08-784-512-3
```

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Query Match 37.2%; Score 1269; DB 2; Length 396;
Best Local Similarity 97.9%; Pred. No. 3.8e-94;
Matches 234; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 387 LPTWSPVPEPKSCDHTHTCPAPAPELLGSPVFLFPKPKDTLMISRTPEVTCVVVDV 446
DB 157 LFGGDPPEPKSCDHTHTCPAPAPELLGSPVFLFPKPKDTLMISRTPEVTCVVVDV 216
QY 447 HEDPEVKFNWYVDGVEVNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKA 506
DB 217 HEDPEVKFNWYVDGVEVNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKA 276
QY 507 LPAPLEKTIKSAKGGPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAMWESNQP 566
DB 277 LPAPLEKTIKSAKGGPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAMWESNQP 336
QY 567 ENNYKTTPTPLVSDSGFFLYSKLTVDKSRMOQGNVFSVMEALHNHYTOKSLSPG 625
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Db 337 ENNYKTTPTPLVSDSGFFLYSKLTVDKSRMOQGNVFSVMEALHNHYTOKSLSPG 395

```
RESULT 80
US-09-176-228-3
; Sequence 3, Application US/09176228
; Patent No. 6180334
; GENERAL INFORMATION:
; APPLICANT: BARTNIK, Eckart
; APPLICANT: EIDENMUELLER, Bernd
; APPLICANT: BUETNER, Frank
; APPLICANT: CATERSON, Bruce
; APPLICANT: HUGHES, Clare
; TITLE OF INVENTION: An artificial recombinant substrate (RAGG 1)
; TITLE OF INVENTION: and native aggregan to study the proteolytic activity of
; TITLE OF INVENTION: "Aggreganase" in cell culture systems
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Foley & Lardner
; STREET: Suite 500, 3000 K Street, N.W.
; CITY: Washington, D.C.
; COUNTRY: USA
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/176,228
; FILING DATE:
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US/08/784,512
; FILING DATE: 17-JAN-1997
; APPLICATION NUMBER: EP 96100682.2
; FILING DATE: 18-JAN-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: GRANADOS, Patricia D.
; REGISTRATION NUMBER: 33,683
; REFERENCE/DOCKET NUMBER: 18748/311
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 672-5300
; TELEFAX: (202) 672-5399
; TELEX: 904136
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 396 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..396
US-09-176-228-3
```

```
Query Match 37.2%; Score 1269; DB 3; Length 396;
Best Local Similarity 97.9%; Pred. No. 3.8e-94;
Matches 234; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 387 LPTWSPVPEPKSCDHTHTCPAPAPELLGSPVFLFPKPKDTLMISRTPEVTCVVVDV 446
DB 157 LFGGDPPEPKSCDHTHTCPAPAPELLGSPVFLFPKPKDTLMISRTPEVTCVVVDV 216
QY 447 HEDPEVKFNWYVDGVEVNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKA 506
DB 217 HEDPEVKFNWYVDGVEVNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKA 276
QY 507 LPAPLEKTIKSAKGGPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAMWESNQP 566
DB 277 LPAPLEKTIKSAKGGPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAMWESNQP 336
QY 567 ENNYKTTPTPLVSDSGFFLYSKLTVDKSRMOQGNVFSVMEALHNHYTOKSLSPG 625
```



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; APPLICANT: Cycomed, Inc. (all states except US)
; APPLICANT: Nocke, Karl (US only)
; APPLICANT: Lobell, Robert B (US only)
; TITLE OF INVENTION: STABILIZED DIMER OF KIT LIGAND AND
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Neave
; STREET: 1251 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: United States of America
; ZIP: 10020
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/03866
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/220,379
; FILING DATE: 28-MAR-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Haley Jr, James F
; REGISTRATION NUMBER: 27,794
; REFERENCE/DOCKET NUMBER: Cycomed/2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-596-9000
; TELEFAX: 212-596-9090
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 424 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; PCT-US95-03866-12

Query Match      37.2%; Score 1268.5; DB 5; Length 424;
Best Local Similarity 90.8%; Pred. No. 4.7e-94;
Matches 237; Conservative 6; Mismatches 13; Indels 5; Gaps 1;

QY      370  CLTSDSGQVLESNIKV-----LPTWSTPVEBPKSCDKHTGCPAPBLLGGPSVFLRPP 424
      163  CVVSTSLSPBKDSRSVTKRPFMLPVPVADPEPKSCDKHTGCPAPBLLGGPSVFLRPP 222
      425  KPKDTLMSRTPDEVTCVVVDVSHEDPEVKFNNYVDSGEVHNAAKTRREOYNSTYRVVSV 484
      223  KPKDTLMSRTPDEVTCVVVDVSHEDPEVKFNNYVDSGEVHNAAKTRREOYNSTYRVVSV 282
      485  LTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSL 544
      283  LTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSL 342
      545  TCLVKGFPYPSDIAVEMESNGQPENNYKTTPVLDSGSEFLLYSKLTVDKSRMQQGNVFSFC 604
      343  TCLVKGFPYPSDIAVEMESNGQPENNYKTTPVLDSGSEFLLYSKLTVDKSRMQQGNVFSFC 402
      605  SVMHEALHNHYTQKSLSLSPG 625
      403  SVMHEALHNHYTQKSLSLSPG 423

RESULT 84
PCT-US95-03866-14
; Sequence 14, Application PC/TUS9503866
; GENERAL INFORMATION:
; APPLICANT: Cycomed, Inc. (all states except US)
; APPLICANT: Nocke, Karl (US only)
; APPLICANT: Lobell, Robert B (US only)
; TITLE OF INVENTION: STABILIZED DIMER OF KIT LIGAND AND
```

```
; TITLE OF INVENTION: FLT-3/FLK-2 LIGAND
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Neave
; STREET: 1251 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: United States of America
; ZIP: 10020
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/03866
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/220,379
; FILING DATE: 28-MAR-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Haley Jr, James F
; REGISTRATION NUMBER: 27,794
; REFERENCE/DOCKET NUMBER: Cycomed/2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-596-9000
; TELEFAX: 212-596-9090
; INFORMATION FOR SEQ ID NO: 14:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 424 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; PCT-US95-03866-14

Query Match      37.2%; Score 1268.5; DB 5; Length 424;
Best Local Similarity 90.8%; Pred. No. 4.7e-94;
Matches 237; Conservative 6; Mismatches 13; Indels 5; Gaps 1;

QY      370  CLTSDSGQVLESNIKV-----LPTWSTPVEBPKSCDKHTGCPAPBLLGGPSVFLRPP 424
      163  CVVSTSLSPBKDSRSVTKRPFMLPVPVADPEPKSCDKHTGCPAPBLLGGPSVFLRPP 222
      425  KPKDTLMSRTPDEVTCVVVDVSHEDPEVKFNNYVDSGEVHNAAKTRREOYNSTYRVVSV 484
      223  KPKDTLMSRTPDEVTCVVVDVSHEDPEVKFNNYVDSGEVHNAAKTRREOYNSTYRVVSV 282
      485  LTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSL 544
      283  LTVLHODMLNGEKYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSL 342
      545  TCLVKGFPYPSDIAVEMESNGQPENNYKTTPVLDSGSEFLLYSKLTVDKSRMQQGNVFSFC 604
      343  TCLVKGFPYPSDIAVEMESNGQPENNYKTTPVLDSGSEFLLYSKLTVDKSRMQQGNVFSFC 402
      605  SVMHEALHNHYTQKSLSLSPG 625
      403  SVMHEALHNHYTQKSLSLSPG 423

RESULT 85
US-09-485-737B-67
; Sequence 67, Application US/09485737B
; Patent No. 6350860
; GENERAL INFORMATION:
; APPLICANT: Buyee, Marie-Ange
; APPLICANT: Sablon, Erwin
; TITLE OF INVENTION: INTERFERON-gamma-BINDING MOLECULES FOR TREATING SEPTIC SHOCK,
; FILE REFERENCE: INNS:015
; CURRENT APPLICATION NUMBER: US/09/485,737B
; CURRENT FILING DATE: 2000-02-14
```

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/ PRIOR APPLICATION NUMBER: PCT/EP 98/05165
/ PRIOR FILING DATE: 1998-08-14
/ PRIOR APPLICATION NUMBER: EPO 98870139.7
/ PRIOR FILING DATE: 1998-06-18
/ PRIOR APPLICATION NUMBER: EPO 97870122.5
/ PRIOR FILING DATE: 1997-08-18
/ NUMBER OF SEQ ID NOS: 104
/ SOFTWARE: Patent version 3.0
/ SEQ ID NO 67
/ LENGTH: 468
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: SYNTHETIC
US-09-485-737B-67

Query Match      37.2%; Score 1268.5; DB 4; Length 468;
Best Local Similarity 46.9%; Pred. No. 5.4e-94;
Matches 295; Conservative 39; Mismatches 102; Indels 193; Gaps 17;

Qy 11 LVLQLALLPATQGNKVLGKKGDTVELTCTASQKSIQFHWKNSNOIKILNGSFLT 70
Db 17 VILSQVOLVSGSE-----LKKPGASVKISCKAS---GYFTDYGMNWKQAPQG---L 65
Qy 71 KGPSKLNDRADSRSLMD-QGNFP-----LIINKLKIEDSDTYICEVEDQKEEV 118
Db 66 KMMGWINTYTGESTYVDFFKGRFVSLDTSVAAYLISSLKABDTATYFC----- 116
Qy 119 QLVFGLTANSPTHLQ--GQSLTLTLESPPGSSPSVQCRSPRKNIOGKTLVSQLEL 176
Db 117 -----ARRGFAMDYWGQGTIVTSSASTKGPSPFLPASPSTSGG--TALAGCL-- 165
Qy 177 QDSGTMTCTVLQONQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSFPLAFTVEKLTGSG 236
Db 166 -----VXDYFPEPVTVS----- 177
Qy 237 ELWMOAERASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGN 296
Db 178 ---NMSGALTSG-----VH-TTPAVL-QSSGLYS 201
Qy 297 LTLAEAKTGKLEHENVLVVWRATOLQKNLTCEVWGTPSKLMLSLKLENKAKVSKREK 356
Db 202 LSSVVTVPSSSLGTGYI-----CNV-----NHK 225
Qy 357 PWWVLNPEAGMWQCLSDSGVLTLESNIKVLPTWSTVEPKSCDKTHTCPCPAPPELLGG 416
Db 226 P-----SNTKV-----DKRVEPKSCDKTHTCPCPAPPELLGG 257
Qy 417 PSVFLPPPKPDLTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEFNNAKTKPREEOYN 476
Db 258 PSVFLPPPKPDLTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEFNNAKTKPREEOYN 317
Qy 477 STYRVAVSLTVLHODMLNGEKYKCKVSNKALPAPIEKTISRAKQGPPEQVYTLPPSDE 536
Db 318 STYRVAVSLTVLHODMLNGEKYKCKVSNKALPAPIEKTISRAKQGPPEQVYTLPPSDE 377
Qy 537 LTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRW 596
Db 378 MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRW 437
Qy 597 QQGNVFSCSVHREALHNHYTQKSLSLSPG 625
Db 438 QQGNVFSCSVHREALHNHYTQKSLSLSPG 466

RESULT 86
US-09-485-737B-90
/ Sequence 90, Application US/09485737B
/ Patent No. 6350860
/ GENERAL INFORMATION:
/ APPLICANT: Bayser, Marie-Ange
/ APPLICANT: Sablon, Etwin
/ TITLE OF INVENTION: INTERFERON-gamma-BINDING MOLECULES FOR TREATING SEPTIC SHOCK,
```

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/ TITLE OF INVENTION: CACHEXIA, IMMUNE DISEASES AND SKIN DISORDERS
/ FILE REFERENCE: INNS:015
/ CURRENT APPLICATION NUMBER: US/09/485, 737B
/ CURRENT FILING DATE: 2000-02-14
/ PRIOR APPLICATION NUMBER: PCT/EP 98/05165
/ PRIOR FILING DATE: 1998-08-14
/ PRIOR APPLICATION NUMBER: EPO 98870139.7
/ PRIOR FILING DATE: 1998-06-18
/ PRIOR APPLICATION NUMBER: EPO 97870122.5
/ PRIOR FILING DATE: 1997-08-18
/ NUMBER OF SEQ ID NOS: 104
/ SOFTWARE: Patent version 3.0
/ SEQ ID NO 90
/ LENGTH: 711
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: SYNTHETIC
US-09-485-737B-90

Query Match      37.2%; Score 1268.5; DB 4; Length 711;
Best Local Similarity 46.9%; Pred. No. 1e-93;
Matches 295; Conservative 39; Mismatches 102; Indels 193; Gaps 17;

Qy 11 LVLQLALLPATQGNKVLGKKGDTVELTCTASQKSIQFHWKNSNOIKILNGSFLT 70
Db 17 VILSQVOLVSGSE-----LKKPGASVKISCKAS---GYFTDYGMNWKQAPQG---L 65
Qy 71 KGPSKLNDRADSRSLMD-QGNFP-----LIINKLKIEDSDTYICEVEDQKEEV 118
Db 66 KMMGWINTYTGESTYVDFFKGRFVSLDTSVAAYLISSLKABDTATYFC----- 116
Qy 119 QLVFGLTANSPTHLQ--GQSLTLTLESPPGSSPSVQCRSPRKNIOGKTLVSQLEL 176
Db 117 -----ARRGFAMDYWGQGTIVTSSASTKGPSPFLPASPSTSGG--TALAGCL-- 165
Qy 177 QDSGTMTCTVLQONQKVEFKIDIVLAFOKASSIVYKKEGEQVEFSFPLAFTVEKLTGSG 236
Db 166 -----VXDYFPEPVTVS----- 177
Qy 237 ELWMOAERASSSKSWITFDLKNKEVSVKRVTDQPKLQMGKKLPLHLTLPOALPOYAGSGN 296
Db 178 ---NMSGALTSG-----VH-TTPAVL-QSSGLYS 201
Qy 297 LTLAEAKTGKLEHENVLVVWRATOLQKNLTCEVWGTPSKLMLSLKLENKAKVSKREK 356
Db 202 LSSVVTVPSSSLGTGYI-----CNV-----NHK 225
Qy 357 PWWVLNPEAGMWQCLSDSGVLTLESNIKVLPTWSTVEPKSCDKTHTCPCPAPPELLGG 416
Db 226 P-----SNTKV-----DKRVEPKSCDKTHTCPCPAPPELLGG 257
Qy 417 PSVFLPPPKPDLTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEFNNAKTKPREEOYN 476
Db 258 PSVFLPPPKPDLTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEFNNAKTKPREEOYN 317
Qy 477 STYRVAVSLTVLHODMLNGEKYKCKVSNKALPAPIEKTISRAKQGPPEQVYTLPPSDE 536
Db 318 STYRVAVSLTVLHODMLNGEKYKCKVSNKALPAPIEKTISRAKQGPPEQVYTLPPSDE 377
Qy 537 LTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRW 596
Db 378 MTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRW 437
Qy 597 QQGNVFSCSVHREALHNHYTQKSLSLSPG 625
Db 438 QQGNVFSCSVHREALHNHYTQKSLSLSPG 466

RESULT 87
US-09-313-942-9
/ Sequence 9, Application US/09313942
/ Patent No. 6472179
```

```
/ GENERAL INFORMATION:
/ APPLICANT: REGENERON PHARMACEUTICALS, INC.
/ TITLE OF INVENTION: RECEPTOR BASED ANTAGONISTS, AND METHODS OF MAKING
/ TITLE OF INVENTION: AND USING
/ FILE REFERENCE: REG 203-A
/ CURRENT APPLICATION NUMBER: US/09/313,942
/ PRIOR FILING DATE: 1999-05-19
/ PRIOR APPLICATION NUMBER: 09/313,942
/ PRIOR FILING DATE: 1999-05-19
/ PRIOR APPLICATION NUMBER: 60/101,858
/ PRIOR FILING DATE: 1998-09-25
/ NUMBER OF SEQ ID NOS: 32
/ SOFTWARE: FastSeq for Windows Version 3.0
/ SEQ ID NO 9
/ LENGTH: 951
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-09-313-942-9
```

```
Query Match          37.2%; Score 1268.5; DB 4; Length 951;
Best Local Similarity 96.7%; Pred. No. 1.5e-93;
Matches 226; Conservative 0; Mismatches 4; Indels 4; Gaps 1;
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```
QY      382 SNIKVLPWSTPVEPKSCDKTHTCPCPAPPELLGSPVFLFPPKPKDTLMIISRTPEVTCV 441
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      711 SNTKV-----DKVEPKSCDKTHTCPCPAPPELLGSPVFLFPPKPKDTLMIISRTPEVTCV 766

QY      442 VVDVSHEDPEVKNNVYDGVENHNAKTPREEOYNSTRVVSVLTVLHODMLNGEYKCK 501
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      767 VVDVSHEDPEVKNNVYDGVENHNAKTPREEOYNSTRVVSVLTVLHODMLNGEYKCK 826

QY      502 VSNKALPAPIEKTISAKAGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIWEME 561
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      827 VSNKALPAPIEKTISAKAGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIWEME 886

QY      562 SNGQPENNYKTTTPPVLDSDGSFPLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTQKSL 621
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      887 SNGQPENNYKTTTPPVLDSDGSFPLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTQKSL 946

QY      622 LSPG 625
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      947 LSPG 950
```

RESULT 88

```
US-09-247-352-3
/ Sequence 3, Application US/09247352
/ Patent No. 6312693
/ GENERAL INFORMATION:
/ APPLICANT: Aruffo, Alejandro A.
/ APPLICANT: Sladak, Anthony W.
/ APPLICANT: Berry, Karen K.
/ APPLICANT: Harris, Linda
/ APPLICANT: Thorne, Barbara A.
/ APPLICANT: Bajorath, Jurgen
/ APPLICANT: Huse, William D.
/ APPLICANT: Wu, Heren
/ APPLICANT: Mackinn, Jeffrey D.
/ TITLE OF INVENTION: ANTIBODIES AGAINST HUMAN CD40
/ FILE REFERENCE: DB2a SEQUENCE
/ CURRENT APPLICATION NUMBER: US/09/247,352
/ CURRENT FILING DATE: 1999-02-10
/ EARLIER APPLICATION NUMBER: 09/026,291
/ EARLIER FILING DATE: 1998-02-19
/ NUMBER OF SEQ ID NOS: 14
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 3
/ LENGTH: 451
/ TYPE: PRT
/ ORGANISM: Human and Mouse
US-09-247-352-3
```

Query Match 37.1%; Score 1268; DB 4; Length 451;

Best Local Similarity 48.4%; Pred. No. 5.6e-94;
Matches 224; Conservative 31; Mismatches 103; Indels 180; Gaps 17;

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QY      30 LGKKGDTVELTTPASOKSIOFHMKNSNOIKLNGQSFLLTGPSPKLANDRADSRSLMD- 88
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      11 LKKPGETVRISSCKAS-----GYAFTTGMQVQMPKPG--LKMIGMINTHSGVPKXVEDF 64

QY      89 QGNFP-----LIINKIKEDSDTYICEVEDQKEEVQLVFGLTANSDBTHLQGO 137
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      65 KRFAPASLETSAHTVYLOISNLKEDDTATYFC-VNSGNQNDLAYFA-----YMQQ 114

QY      138 SLTLLESPPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSDGTWCTVLQKQKVEFKI 197
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      115 GLTVTVSASTKGSPVFPPLAPSSKSTSG-TAALGL----- 150

QY      198 DIVVLAFOKASSIVYKGEQVEFSFPLAFYVEKLTGSGELMWQAEKRASSKSMITFDLK 257
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      151 -----VKDYFPEPEVTVS-----MNSGALTSG----- 171

QY      258 NKEVSVKRTQDPKLOMGKKLPLHLTLPOALPQVAGSGNLTALAKTKGKHQEVNLYVM 317
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      172 -----VH-TFPAVL-QSSGLVSLSSVTVVPSSSLGTQTYI--- 204

QY      318 RATQLOKMLTCEWGPSTSPKMLSLKLENKAKVSKREKPVVVLNPEAGMQCLSDSQ 377
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      205 -----CNV-----NKP----- 211

QY      378 VLESNIKVLPWSTPVEPKSCDKTHTCPCPAPPELLGSPVFLFPPKPKDTLMIISRTPE 437
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      212 -----SNTKV-----DKVEPKSCDKTHTCPCPAPPELLGSPVFLFPPKPKDTL-ISRPE 262

QY      438 VTCVAVDVSHEDEPKFMVYDGVENHNAKTPREEOYNSTRVVSVLTVLHODMLNGE 497
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      263 VTCVAVDVSHEDEPKFMVYDGVENHNAKTPREEOYNSTRVVSVLTVLHODMLNGE 322

QY      498 YKCKVSNKALPAPIEKTISAKAGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIA 557
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      323 YKCKVSNKALPAPIEKTISAKAGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIA 382

QY      558 VEMESNGQPENNYKTTTPPVLDSDGSFPLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTQ 617
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      383 VEMESNGQPENNYKTTTPPVLDSDGSFPLYSKLTVDKSRMOQGNVFCSCVMHEALHNHYTQ 442

QY      618 KSLSLSPG 625
      ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB      443 KSLSLSPG 450
```

RESULT 89

```
US-09-466-635-3
/ Sequence 3, Application US/09466635
/ Patent No. 6413514
/ GENERAL INFORMATION:
/ APPLICANT: Aruffo, Alejandro A.
/ APPLICANT: Sladak, Anthony W.
/ APPLICANT: Berry, Karen K.
/ APPLICANT: Harris, Linda
/ APPLICANT: Thorne, Barbara A.
/ APPLICANT: Bajorath, Jurgen
/ TITLE OF INVENTION: ANTIBODIES AGAINST HUMAN CD40
/ CURRENT APPLICATION NUMBER: US/09/466,635
/ CURRENT FILING DATE: 1999-12-17
/ NUMBER OF SEQ ID NOS: 8
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 3
/ LENGTH: 451
/ TYPE: PRT
/ ORGANISM: Human and Mouse
US-09-466-635-3
```

Query Match 37.1%; Score 1268; DB 4; Length 451;
Best Local Similarity 48.4%; Pred. No. 5.6e-94;

```
Matches 294; Conservative 31; Mismatches 103; Indels 180; Gaps 17;
QY 30 LGKKGDYELACTAGSQKSIOPHMKNNSQIKILGNQSGFLTRKPSKLNDRADSRRLMD- 88
DB 11 LKKEEIVRISCKS--GYAFFTTGQMVQEMPEKG--LKIWMITHTSGVFKYEDF 64
QY 89 QGNRP-----LIIKNLKIEDSDTYICEVEDKEEVLVFGLTANSDDTHLLOGQ 137
DB 65 KGRFAFSLETSANFAYLQISNLKNEEDTATYFC-VMSGNGYDLAVFA-----YWGQ 114
QY 138 SLTLTLESPGSSPSVQCRSPRGKNIQGGKTLVSQLELDSDGVTCTVLONQKVEKI 197
DB 115 GTLVVSAASTKGPVFPPLAPSSKSTSG-7AALGCL----- 150
QY 198 DIVVLAFAQASSIYVKEGEQVEFPLAFTVEKLTSGSELWMQAEARASSKSWITFDLK 257
DB 151 -----VKDYFPEPVTVS-----WNSGALTSG----- 171
QY 258 NKEVSVKRVTDPRKLQMGKULPLHLTPQALPOYAGSNLTALAEAKTGKLGHOEVLVVM 317
DB 172 -----VH-TFPAVL-QSSGLVSLSSVTVTPSSSLGTOTYI--- 204
QY 318 RATQLOKMLTCEVWGPTSPKMLSLKLEKKAIVSKREKPVWVLNPEAGMQLLSDSGQ 377
DB 205 -----CNV-----NHRP----- 211
QY 378 VLLESNIKVLPTWSTPVEPKSCDKHTHTCPCPAPBELGSPVFLPPPKKDTLMI 437
DB 212 -----SNTKV-----DKVPEPKSCDKHTHTCPCPAPBELGSPVFLPPPKKDTLMI 262
QY 438 VTCVVVDVSHEDPEVKFNMVYDGVENHNAKTPREEOYNSTYRVVSVLTVLHQDWLNGKE 497
DB 263 VTCVVVDVSHEDPEVKFNMVYDGVENHNAKTPREEOYNSTYRVVSVLTVLHQDWLNGKE 322
QY 498 YKCKRSNKLPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFIPSDIA 557
DB 323 YKCKRSNKLPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFIPSDIA 382
QY 558 VEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDSKRWQGNVSCVMHEALHNIHQ 617
DB 393 VEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDSKRWQGNVSCVMHEALHNIHQ 442
QY 618 KSLSLSPG 625
DB 443 KSLSLSPG 450

RESULT 90
US-09-301-593-43
; Sequence 43, Application US/09301593A
; Patent No. 6455677
; GENERAL INFORMATION:
; APPLICANT: Park, John E.
; APPLICANT: Garin-Chesa, Pilar
; APPLICANT: Bamberger, Uwe
; APPLICANT: Legier, Olivier
; APPLICANT: Saidanah, Jose W.
; APPLICANT: Retzig, Wolfgang J.
; TITLE OF INVENTION: RAP-specific Antibody with improved Productibility
; FILE REFERENCE: 0652.1890001
; CURRENT APPLICATION NUMBER: US/09/301,593A
; EARLIER FILING DATE: 1999-04-29
; EARLIER APPLICATION NUMBER: EP 98107925.4
; EARLIER FILING DATE: 1998-04-30
; EARLIER APPLICATION NUMBER: US 60/086,049
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 43
; LENGTH: 472
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-301-593-43
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Query Match 37.1%; Score 1268; DB 4; Length 472;
Best Local Similarity 50.8%; Pred. No. 6e-94;
Matches 281; Conservative 40; Mismatches 94; Indels 138; Gaps 14;
QY 120 LVFGLTANSDDTHLLOGSITLTLESPPGSSPSVQCSPP----- 159
DB 10 LLAVAPGAHQVOVLQSGAEV---KKPGASVKSCKTSRYTPEYTIHWVRAPGRLE 65
QY 160 -----GKRIQGGKTLV-----SOLEODSGTWTCTVLQNOKVE 194
DB 66 WIGGINPNNGIPVYNQFKGRALITVCKASSTAYMEISSLSEDTAYYCA---RRRIA 121
QY 195 FKIDIVVLAFAQASSIYVKEGEQVEFPLAFTVEKLTSGSELWMQAEARASSKSWITF 254
DB 122 YGYD-----EGHAMDY-----WGGQ-----TLVTY 141
QY 255 DLKKEVSVKRVTDPRKLQMGKULPLHLTPQALPOYAGSNLTALAEAKTGKLGHOEVL 314
DB 142 SSTRKGPVFPPLAPSSKSTSGTAAIGCLVADYFPE-----PVTVWNSGALTSGVHT 194
QY 315 --VYMRATQLOKMLTCEVWGPTSPKMLSLKLEKKAIVSKREKPVWVLNPEAGMQLL 372
DB 195 FPAVLQSSGLY-SLSSVTVPPSS-----SLGTOTYICNV--NRP----- 231
QY 373 SDSGQVLLESNIKVLPTWSTPVEPKSCDKHTHTCPCPAPBELGSPVFLPPPKKDTLMI 432
DB 232 -----SNTKV-----DKVPEPKSCDKHTHTCPCPAPBELGSPVFLPPPKKDTLMI 278
QY 433 SRTPEVTCVVVDVSHEDPEVKFNMVYDGVENHNAKTPREEOYNSTYRVVSVLTVLHQDW 492
DB 279 SRTPEVTCVVVDVSHEDPEVKFNMVYDGVENHNAKTPREEOYNSTYRVVSVLTVLHQDW 338
QY 493 LNKKEYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFY 552
DB 339 LNKKEYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFY 398
QY 553 PSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDSKRWQGNVSCVMHEALH 612
DB 399 PSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDSKRWQGNVSCVMHEALH 458
QY 613 NHTYQKSLSPG 625
DB 459 NHTYQKSLSPG 471

RESULT 91
US-09-180-100-11
; Sequence 11, Application US/09180100
; Patent No. 6306395
; GENERAL INFORMATION:
; APPLICANT: NAKAMURA, No. 6306395io
; APPLICANT: NAKATA, Shigekazu
; TITLE OF INVENTION: NOVEL Fas ANTIGEN DERIVATIVE
; FILE REFERENCE: 1110-207P
; CURRENT APPLICATION NUMBER: US/09/180,100
; EARLIER FILING DATE: 1998-11-02
; EARLIER APPLICATION NUMBER: PCT/JP97/01502
; EARLIER FILING DATE: 1997-05-01
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 11
; LENGTH: 360
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-180-100-11

Query Match 37.1%; Score 1267.5; DB 4; Length 360;
Best Local Similarity 91.9%; Pred. No. 4.4e-94;
Matches 238; Conservative 2; Mismatches 16; Indels 3; Gaps 1;
QY 370 CLLSDSG---QVLLESNIKVLPTWSTPVEPKSCDKHTHTCPCPAPBELGSPVFLPPKXP 426
```



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Db      101  CTCKCEHIIKECTLTNTKCKEGRSNEPKSCDKHTHTCPCPAPBLLGSPVFLFPKP 160
        427  KDTLMTSRTPEVTCVAVDVSHEDEPKFMVYDGVENHNAKTKPREOYNSTRVVSALT 486
        161  KDTLMTSRTPEVTCVAVDVSHEDEPKFMVYDGVENHNAKTKPREOYNSTRVVSALT 220
Qy      487  VLIHQDLNKGKEYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLT 546
        221  VLIHQDLNKGKEYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLT 280
Db      547  LVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSGSPFLYSKLTVDKSRWQGNVFSQSV 606
        281  LVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSGSPFLYSKLTVDKSRWQGNVFSQSV 340
Qy      607  MHEALHNHYTKSLSPG 625
        341  MHEALHNHYTKSLSPG 359
Db
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RESULT 92

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US-09-180-100-22
/ Sequence 22, Application US/09180100
/ Patent No. 6306395
/ GENERAL INFORMATION:
/ APPLICANT: NAKAMURA, No. 630639510
/ APPLICANT: NAGATA, Shigekazu
/ TITLE OF INVENTION: NOVEL FAS ANTIGEN DERIVATIVE
/ FILE REFERENCE: 1110-207P
/ CURRENT APPLICATION NUMBER: US/09/180,100
/ EARLIER FILING DATE: 1998-11-02
/ EARLIER APPLICATION NUMBER: PCT/JP97/01502
/ NUMBER OF SEQ ID NOS: 25
/ SOFTWARE: Patentin Ver. 2.0
/ SEQ ID NO 22
/ LENGTH: 376
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-09-180-100-22
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Query Match      37.1%; Score 1267.5; DB 4; Length 376;
Best Local Similarity 91.9%; Pred. No. 4,7e-94;
Matches 228; Conservative 2; Mismatches 16; Indels 3; Gaps 1;

Qy      370  CLLSDSG---QVLLSENIVKLPWSTPVPKSCDKHTHTCPCPAPBLLGSPVFLFPKP 426
        117  CTCKCEHIIKECTLTNTKCKEGRSNEPKSCDKHTHTCPCPAPBLLGSPVFLFPKP 176
Db      427  KDTLMTSRTPEVTCVAVDVSHEDEPKFMVYDGVENHNAKTKPREOYNSTRVVSALT 486
        177  KDTLMTSRTPEVTCVAVDVSHEDEPKFMVYDGVENHNAKTKPREOYNSTRVVSALT 236
Qy      487  VLIHQDLNKGKEYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLT 546
        237  VLIHQDLNKGKEYCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQVSLT 296
Db      547  LVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSGSPFLYSKLTVDKSRWQGNVFSQSV 606
        297  LVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSGSPFLYSKLTVDKSRWQGNVFSQSV 356
Qy      607  MHEALHNHYTKSLSPG 625
        357  MHEALHNHYTKSLSPG 375
Db
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RESULT 93

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US-09-027-449-71
/ Sequence 71, Application US/09027449
/ Patent No. 6025158
/ GENERAL INFORMATION:
/ APPLICANT: Gonzalez, Tania R.
/ APPLICANT: Leon, Steven R.
/ APPLICANT: Presta, Leonard G.
```

```
/ TITLE OF INVENTION: Antibody Fragment-Polymer Conjugates and
/ TITLE OF INVENTION: Humanized Anti-IL-8 Monoclonal Antibodies
/ NUMBER OF SEQUENCES: 72
/ CORRESPONDENCE ADDRESS:
/ ADDRESSER: Genentech, Inc.
/ STREET: 1 DNA Way
/ CITY: South San Francisco
/ STATE: California
/ COUNTRY: USA
/ ZIP: 94080
```

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/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Winpatin (Genentech)
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/027,449
/ FILING DATE: 20-Feb-1998
/ CLASSIFICATION: 435
/ PRIORITY APPLICATION DATA:
/ APPLICATION NUMBER: 60/074,330
/ FILING DATE: 22-Jan-1998
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 60/038,664
/ FILING DATE: 21-Feb-1997
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Love, Richard B.
/ REGISTRATION NUMBER: 34,659
/ REFERENCE/DOCKET NUMBER: P1085R3-2
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 650/225-5530
/ TELEFAX: 650/952-9881
/ INFORMATION FOR SEQ ID NO: 71:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 452 amino acids
/ TYPE: Amino Acid
/ TOPOLOGY: Linear
US-09-027-449-71
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Query Match      37.1%; Score 1267.5; DB 3; Length 452;
Best Local Similarity 48.3%; Pred. No. 6,2e-94;
Matches 291; Conservative 34; Mismatches 109; Indels 169; Gaps 15;

Qy      30  LGKKDYTELCTTAS--QKSGIOPFMKNSNQIKILGNQGSF-LTGGPKLADRDRSRSL 86
        11  LVQPGSLRLSCAAGSYSPSSHMYMWVRQAPGKLEWVGVIDPSGKTTYNQKFKGRFTL 70
Db      87  W---DQGNFPLIIKKLIKIEDSDTYICEVEDQKEVQLLVFGILTANSDTHL-LOGQSLTUT 142
        71  SRDNKNTATVLIOMNSLRABEDTAVVYICARGDYR-----YNGDFFPDVWGQGTIVT 119
Qy      143  LSPPGSSPVQCRSPRGKNIQGGKTLVSQLELDGSGTWCTVLIQNKVYEFKIDIVVL 202
        120  VSSASTKGPVPLPSSKSTSG- TALLGL----- 150
Db      203  AFQKASSIVYKKEGQVFPFLATVYKLTGSGELMWQAERASSKSWITFDLKNKEVS 262
        151  -----VDYFPEPVTVS-----NNSGALTSG----- 171
Qy      263  VKRVTQDPLQWKKLPHLTLPLQALPOYAGSGNLTLLAEKGLKHOENVLVVWRATOL 322
        172  -----VH-TFPAVL-QSSGLYSLSSVYVTPSSSLGTQYI----- 204
Db      323  QKNLTCEVWGPTSPKMLSLKLENKATVSRKRPVWVLANPDAGMOCLLSDSGVLLS 382
        205  -----CNV-----NHRK-----S 212
Qy      363  NIKULPTWSTPVPKSCDKHTHTCPCPAPBLLGSPVFLFPKPXDITLMISRTPEVTCV 442
        213  NTKV---DKRVEPKSCDKHTHTCPCPAPBLLGSPVFLFPKPXDITLMISRTPEVTCV 268
Qy      443  VDVSHEDEPKFMVYDGVENHNAKTKPREOYNSTRVVSALTVDLHODMLNKGKEYCKV 502
        |||
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Db 269 VDVSHDEPEVKFNMYVDGVEVHNAAKTPREBOYNSTRVSVLTVLHODMLNGKEYCKV 328
QY 503 SNKALPAPIEKTISKAKGPREPOVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMES 562
Db 329 SNKALPAPIEKTISKAKGPREPOVYTLPPSRDEMTKNOVSLTCLVKGFYPSDIAVEMES 388
QY 563 NGQPENNYKTTTPPLDSDGSFFLYSKLTVDKSRWQGNVSCSYMHGALHNHYTQKSLSL 622
Db 389 NGQPENNYKTTTPPLDSDGSFFLYSKLTVDKSRWQGNVSCSYMHGALHNHYTQKSLSL 448
QY 623 SPG 625
Db 449 SPG 451

RESULT 94
US-09-026-985-71
Sequence 71, Application US/09026985
Patent No. 6133426
GENERAL INFORMATION:
APPLICANT: Gonzalez, Tania R.
APPLICANT: Leong, Steven R.
APPLICANT: Presta, Leonard G.
TITLE OF INVENTION: Antibody Fragment-Polymer Conjugates and
TITLE OF INVENTION: Humanized Anti-IL-8 Monoclonal Antibodies
NUMBER OF SEQUENCES: 72
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 1 DNA Way
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatIn (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/026,985
FILING DATE: 20-Feb-1998
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Love, Richard B.
REGISTRATION NUMBER: 34,659
REFERENCE/DOCKET NUMBER: P1085R3-1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/225-5530
TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 71:
SEQUENCE CHARACTERISTICS:
LENGTH: 452 amino acids
TYPE: Amino Acid
TOPOLOGY: Linear
US-09-026-985-71

Query Match 37.1%; Score 1267.5; DB 3; Length 452;
Best Local Similarity 48.3%; Pred No. 6.2e-94;
Matches 291; Conservative 34; Mismatches 109; Indels 169; Gaps 15;

QY 30 LKKKGDVETLCTAS--QKSIQIFWKNKSNQIKLGNQGSF-LTKGPKSLNDRADSRSL 86
Db 11 LVQPGSLRLSCAAGVFSFSHYMWVWAQAPKGLIEWGYIDPSNGETTYNQKFGKRFLL 70
QY 87 W---DQGNFPLIKLKLTEDSDTYICEVEDQKEVQLVLFGILTANSDTHL-LQGQSLTLT 142
Db 71 SRDNKNTAYLQWNSLRADETLVVYCARQDYR-----YXGDFEFVWGQGLTLT 119
QY 143 LESPSSPSVQCRPRGNKIQGKTLVSQLELDQSGTWCTVQLNQKKEFKDIIVL 202
Db 120 VSSASTKGSVFPPLAPSSKSTSGC-TAALGCL----- 150
QY 203 AFQKASIVYKKGEQVEFSPPLAFTVEKLTGSGELMWQAERASSSSKSMITFDLKNKEVS 262

Db 151 -----YKDYFPEPVTVS-----WNSGALTSG----- 171
QY 263 VKRVTQDPKLGWKKPLHLHTLPQALPOYVAGSGLTLALEAKTGKLGHOEVLVYMRATQL 322
Db 172 -----VH-TFPAVL-QSSGLSLSSVIVVPSSSLGTQYI----- 204
QY 323 QKNLTCEWVGPTSPKMLSLKENKEAKVSKREKPVVVLNPEAGMOCLLSDSGVLLS 382
Db 205 -----CNV-----NHKP-----S 212
QY 383 NIKVLPFTWSTPVERKSCDKHTHTCPCPAPELLGSPSYFLPPPKKDTLMTSRTEVTCV 442
Db 213 NTKV-----DKKVEPKSCDKHTHTCPCPAPELLGSPSYFLPPPKKDTLMTSRTEVTCV 268
QY 443 VDVSHDEPEVKFNMYVDGVEVHNAAKTPREBOYNSTRVSVLTVLHODMLNGKEYCKV 502
Db 269 VDVSHDEPEVKFNMYVDGVEVHNAAKTPREBOYNSTRVSVLTVLHODMLNGKEYCKV 328
QY 503 SNKALPAPIEKTISKAKGPREPOVYTLPPSRDELTKNOVSLTCLVKGFYPSDIAVEMES 562
Db 329 SNKALPAPIEKTISKAKGPREPOVYTLPPSRDEMTKNOVSLTCLVKGFYPSDIAVEMES 388
QY 563 NGQPENNYKTTTPPLDSDGSFFLYSKLTVDKSRWQGNVSCSYMHGALHNHYTQKSLSL 622
Db 389 NGQPENNYKTTTPPLDSDGSFFLYSKLTVDKSRWQGNVSCSYMHGALHNHYTQKSLSL 448
QY 623 SPG 625
Db 449 SPG 451

RESULT 95
US-09-121-952A-71
Sequence 71, Application US/09121952A
Patent No. 6458355
GENERAL INFORMATION:
APPLICANT: Genentech, Inc., Hsui, Vanessa
APPLICANT: Koumets, Iphigenia
APPLICANT: Leong, Steven R.
APPLICANT: Presta, Leonard G.
APPLICANT: Shantokh, Zahra
TITLE OF INVENTION: METHODS OF TREATING INFLAMMATORY DISEASES
TITLE OF INVENTION: WITH ANTI-IL-8 ANTIBODY FRAGMENT-POLYMER CONJUGATES
NUMBER OF SEQUENCES: 72
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 1 DNA Way
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPatIn (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/121,952A
FILING DATE: 24-Jul-1998
CLASSIFICATION: 514
Prior Application DATA:
APPLICATION NUMBER: 60/074330
FILING DATE: 22-JAN-1998
Prior Application DATA:
APPLICATION NUMBER: 60/075467
FILING DATE: 20-FEB-1998
ATTORNEY/AGENT INFORMATION:
NAME: Love, Richard B.
REGISTRATION NUMBER: 34,659
REFERENCE/DOCKET NUMBER: P1085R4
TELECOMMUNICATION INFORMATION:

```

; TELEPHONE: 650/222-5530
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 71:
;
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 452 amino acids
;   TYPE: Amino acid
;   TOPOLOGY: Linear
;
US-09-121-952A-71

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Query Match	37.1%	Score 1267.5;	DB 4;	Length 452;
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Oy      30 CGKCKDDYELTCTTAS--QKKSIOFPHKNSNQKIIGNOSF-LTKGPSLUNRADSRRL 86
Db      11 LVOPGGSIRLSCAAGGYSFSSHYHMVRAPOKGLEVGYIDPSNGETTYNOKFKKRFLL 70
Oy      87 W---DQGNFPLIIKNLIKIEDSDTYICEVEDOKEEVLVFGLTANSDFHL-LOGOSLTLT 142
Db      71 SRDNKMTAVLQMNLSLRADTLAVYVCARGDYR-----YNDWFFPDWGGTTLVT 119
Oy      143 LESPPGSSPSVQCRPRGKNIOGGKTLISQLELDGSGTWCTVLDONQKVEKXIDIVVL 202
Db      120 VSSASTKGPVAPLAPSSKSTGG--TAAAGCL----- 150
Oy      203 AFQKASIIYKKEGEQVEFPFLAFTVEKLTGSGELMNOAERASSKSWITFDLKNKEYS 262
Db      151 -----VKDYFPEPTVS-----WNSGALTSG----- 171
Oy      263 VKRVTQDPKLOMGKLLPLHLTLPOALPOYAGSGNLTALAEKTKLHOEVNLVMMRATOL 322
Db      172 -----VH-TFPAVL-QSSGLYSLSSVTVTPSSSLGTQTYI----- 204
Oy      323 QKNLTCEYWGPTSPKLMLSLKENKEAKYSKREKPRVNLNPEAGMOCILSDSGOVLSS 382
Db      205 -----CNV-----NHKP-----S 212
Oy      383 NIKVLPTWSTPVEPKSCDKTHTCPGPCABELLGSPSVLFPFKPKDTLMISRTPEVTCVV 442
Db      213 NTKV----DKKVEPSSCDKTHCCPCPABELLGSPVLFPPKPKDTLMISRTPEVTCVV 268
Oy      443 VDVSHEDPEVKFNMYVDGVEVHNAAKTPREEQYNSTRVVSVLTVLHQMUNGKEYCKCY 502
Db      269 VDVSHEDPEVKFNMYVDGVEVHNAAKTPREEQYNSTRVVSVLTVLHQMUNGKEYCKCY 328
Oy      503 SNKALPAPIEKTISAKGQPREPOVYTLPPSDELTKNOVSLTCLVKGYGYPSTIAEWES 562
Db      329 SNKALPAPIEKTISAKGQPREPOVYTLPPSDEEMTKNOVSLTCLVKGYGYPSTIAEWES 388
Oy      563 NGQPENNYKTPPVLDSDGSFLYLSKLTVDKSRMOQGNVFCSVMEHALHNHTQSLSL 622
Db      389 NGQPENNYKTPPVLDSDGSFLYLSKLTVDKSRMOQGNVFCSVMEHALHNHTQSLSL 448
Oy      623 SPG 625
Db      449 SPG 451

RESULT 96
US-09-234-340A-71
: Sequence 71, Application US/09234340A
: Patent No. 6468532
: GENERAL INFORMATION:
: APPLICANT: Genentech, Inc., Haei, Vanessa
: APPLICANT: Koumenis, Iphigenia
: APPLICANT: Leong, Steven R.
: APPLICANT: Presta, Leonard G.
: APPLICANT: Shahrokhi, Zahra
: APPLICANT: Zapata, Gerard A.
: TITLE OF INVENTION: METHODS OF TREATING INFLAMMATORY DISEASES
: WITH ANTI-IL-8 ANTIBODY FRAGMENT-POLYMER CONJUGATES
: NUMBER OF SEQUENCES: 72
: CORRESPONDENCE ADDRESS:
:

```

ADDRESSEE: Genentech, Inc
STREET: 1 DNA Way
CITY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080

COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WinPacfin (Genentech)
CURRENT APPLICATION DATA: 1992-1993

FILING DATE:

PRIOR APPLICATION DATA:
APPLICATION NUMBER: ITC/00/133 053

FILING DATE: 24-Jul-1998
APPLICATION NUMBER: 60/074330

PRIOR APPLICATION DATA:
FILING DATE: 22-JAN-1998

APPLICATION NUMBER: 60/075467
FILING DATE: 20-FEB-1998

ATTORNEY/AGENT INFORMATION:
NAME: Love, Richard B.

REGISTRATION NUMBER: 34,659
REFERENCE/DOCKET NUMBER: P1085R4

TELEPHONE: 650/225-5530

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;      SEQUENCE CHARACTERISTICS:
;      LENGTH: 453 amino acids
;      TYPE: Amino Acid
;      TOPOLOGY: Linear
US-09-234-340A-71

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Oy	30	LGKGGTVELTCTAS--QKKSIOFPMKNSNOIKILGNQGSF-LTKGSKLINDRADRSRL	86
Db	11	LVPGSGLSLSCAASGYSFSSHYMMWARQDEKGLNMGVYIDPSNGETTYNOKRKHFTL	70
Oy	87	W---DQGNFLLIKLIKIEDSDTYICEVEDQKEVOLLVFGLTANSDTH-LOGQSLLTLT	142
Db	71	SRDNSKNTAYLQNNISLRADTAVVYCGARDYR-----YNGDMFDMGQGLTVT	119
Oy	143	LESPRSSSSVOCRSRKGNIQGGKTLVSQLELDGSGTWCTVYLQNKQKVEFKIDIVL	202
Db	120	VSSASTKGSVPEPLAPSSKSTSG--TAALGCL-----	150
Oy	203	AFQKASSIVYKKEGEQVEFSPLFTAEKTLNGSGELMMQARASSSKWITFDLKNEKVS	262
Db	151	---VDYFPEPTVS-----INSGALTSG-----	171
Oy	263	VKEVTDPKLQNGKKLPLHLTLPOALPOYAGSGNLTALAEKTKGLHQBENVLVMRATOL	322
Db	172	-----YH-TEPAVL--QSSGLVSSSVTVTPSSLSLGTQYVI-----	204
Oy	323	QKNLTGEWVGTPSPKLTMLSLKLENKAVSRKRPVWVLNPEAGMGCCLSDSGVLLS	382
Db	205	---CNV-----NKKP-----S	212
Oy	383	NIKVLPTWSTPYEPKSCDKTHTCPCPAPELLGGSPVFLPPPKDKDTLMSRTPEVTCV	442
Db	213	NTKV-----DKVETPKSCDKTHTCPCPAPELLGGSPVFLPPPKDKDTLMSRTPEVTCV	268
Oy	443	VDVSHSDPEVKRWVYDVGVYNATKTRKEQCNSTRVVSVLTVLHQDLNKGKYYCKV	502
Db	269	VDVSHSDPEVKRWVYDVGVYNATKTRKEQCNSTRVVSVLTVLHQDLNKGKYYCKV	328

Qy	503	SNKALPAPIEKTISKAKGQPREQVYTLTSPRSDLTKNQVSLTCLYKGFSYSDIAVEMES	5622
Db	329	SNKALPAPIEKTISKAKGQPREQVYTLTSPRSEETKNQVSLTCLYKGFYSYSDIAVEMES	3688
Qy	563	NGQPENNYKTTPVLDSDGSFPLYSKLTVDKSRMGOQGVFSCSYVMHEALHNHYTQKSLSL	6222
Db	389	NGQPENNYKTTPVLDSDGSFPLYSKLTVDKSRMGOQGVFSCSYVMHEALHNHYTQKSLSL	4488
Qy	623	SPG 625	
Db	449	SPG 451	

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RESULT 97
US-09-532-856-6
/ Sequence 6, Application US/09532856
/ Patent No. 6458350
/ GENERAL INFORMATION:
/ APPLICANT: COSGMAN, David J.
/ APPLICANT: MULBERG, Jurgen H.
/ APPLICANT: FANSLow II, William C.
/ APPLICANT: KUBIN, Matek
/ TITLE OF INVENTION: ULBP DNA AND POLYPEPTIDES
/ FILE REFERENCE: 2866-US
/ CURRENT APPLICATION NUMBER: US/09/532,856
/ EARLIER FILING DATE: 2000-03-22
/ EARLIER APPLICATION NUMBER: PCT/US98/27048
/ EARLIER FILING DATE: 1998-12-17
/ EARLIER APPLICATION NUMBER: 60/069,857
/ EARLIER FILING DATE: 1997-12-17
/ EARLIER APPLICATION NUMBER: 60/092,946
/ EARLIER FILING DATE: 1998-07-15
/ NUMBER OF SEQ ID NOS: 10
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 6
/ LENGTH: 453
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ NAME/KEY: PEPTIDE
/ LOCATION: (1)..(223)
/ OTHER INFORMATION: ULBP-2 sequences
/ FEATURE:
/ NAME/KEY: PEPTIDE
/ LOCATION: (224)..(453)
/ OTHER INFORMATION: Human Ig Fc sequences
/ US-09-532-856-6

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Query Match	37.1%	Score 1267.5	DB 4	Length 453
Match Local Similarity	60.0%	Pred. No. 6.2e-94		
Matches	263	Conservative	30	Mismatches 66; Indels 79; Gaps 10
Qy	236	GELWMOAQRASSKSMITFDLKNKRVSVKRYQDPKLGKGLPLHLTPQALPOYAGSG	295	
Db	46	GPRMCAVGGQVDEKFTLHYDCGNKYT-----FVSPGKKL-----	81	
Qy	296	NLTLLAEAKTGKHOENVLVNRRATOLQKNTLCEVWGPTSP-KLMLSLKLENKARKVSK-	353	
Db	82	NVTTAKMAKQNPVLRREVVDIL-----TEQRLDIQLENTYRPREPLTDARMSCEQKAGHSNG	137	
Qy	354	-----REKPVW-VLNPRA-----	375	
Db	138	SWQSPFDQIFLLPDESKRMWTTVHVGARKMKKEKENDKVVAMSFRYSPMGICIMLEP-	196	
Qy	376	GQVLLSNIKVLPTMSTPVE-----PKSCDKHTPCRPCAPRLGGSPVFLRPPPK	427	
Db	197	--FLMGMDSTLEPSSAGAPLAMSSTTQLRRSCDKHTPCPCAPRLGEGAPVFLRPPPK	254	
Qy	428	DTLMSRTPEVTCVAVDVSHEDPEYKFMNVYGVGVHNAKTRPREQVYSTRVVSVLVLV	487	
Db	255	DTLMSRTPEVTCVAVDVSHEDPEYKFMNVYGVGVHNAKTRPREQVNSTRVVSVLVLV	314	
Qy	488	LHQDWLNGEYKCKVSKNALPAPIEKTISKAGQPREPQVYLLPPSRDELTKNVQSLTLC	547	

Dd		315	LHQDMNGKXKKYCKKNKSLPAPIEKTSKAKGQREPOVYTLPPSRRELTKNGYSJLCL	374
Qy		548	VKGFPYSDIAVWESNGOPENNYKTTPVLDSGGSFLYSKLTYDKSRHQQGNFSCSVM	607
Dd		375	VKGFPYSDIAVWESNGOPENNYKTTPVLDSGGSFLYSKLTYDKSRHQQGNFSCSVM	434
Qy		608	HEALHNHYTKSLSLSPG	625
Dd		435	HEALHNHYTKSLSLSPG	452

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      RESULT 98
      US-09-524-100C-6
      ; Sequence 6, Application US/09524100C
      ; Patent No. 6653447
      ; GENERAL INFORMATION:
      ; APPLICANT: COSMAN, David J.
      ; APPLICANT: MULLBERG, Jurgen H.
      ; APPLICANT: PANSLOW III, William C.
      ; APPLICANT: KUBIN, Marek
      ; APPLICANT: AMMIRAGE, Richard J.
      ; TITLE OF INVENTION: USP DNA AND POLYPEPTIDES
      ; FILE REFERENCE: 2866-US
      ; CURRENT APPLICATION NUMBR: US/09/524,100C
      ; CURRENT FILING DATE: 2002-05-21
      ; PRIOR APPLICATION NUMBER: PCT/US98/77048
      ; PRIOR FILING DATE: 1998-12-17
      ; PRIOR APPLICATION NUMBER: US 60/069,857
      ; PRIOR FILING DATE: 1997-12-17
      ; PRIOR APPLICATION NUMBER: US 60/092,946
      ; PRIOR FILING DATE: 1998-07-15
      ; NUMBER OF SEQ ID NOS: 14
      ; SOFTWARE: PatentIn version 3.1
      ; SEQ ID NO 6
      ; LENGTH: 453
      ; TYPE: PRT
      ; ORGANISM: Artificial Sequence
      ; FEATURE:
      ; OTHER INFORMATION: Peptide
      ; FEATURE:
      ; NAME/KEY: PEPTIDE
      ; LOCATION: (1)..(223)
      ; OTHER INFORMATION: ULBP-2 sequences
      ; FEATURE:
      ; NAME/KEY: PEPTIDE
      ; LOCATION: (224)..(453)
      ; OTHER INFORMATION: Human Ig Fc sequences
      US-09-524-100C-6

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Best Local Similarity	60.0%	Pred. No. 6.2e-94		
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QY	236	GELMWOAERASSSSKSMITFDLKNKEVSVKRVYODPKLOMGKKLPHLTLPOALPOLYAGSG	295
DB	46	GPRLCAVGGVDDEKFTLHYDCGNKVT-----FVSLGKGL	81
QY	296	NLTLLALEKTKLKHQEVNLVYMRATOLQNLTCVEWGSPTP-KLMLSLKEKEAKVSK-	353
DB	82	NVTTAMKQKNVLNAEVDIL-----TEQGRDQLQENVTYKPELTLQARNSCEQKAGSHSG	137
QY	354	-----REKPVN-VLNPEA-----GPMOCL--LSDS	375
DB	138	SMQSFDFDQILFLPDSEKRMWTVHPGARKNKKEKENDKVVAMSFFHYSMGDCISGIMLD-	196
QY	376	GOVLESNIKYLPFTWSTPVE-----PKSCDKNTKTCPPAPAEILGSPSVFLPEPPKX	427
DB	197	--FLMGMDSTLEPAGAPLASSSGTQIARRCDCKHTCPCPCAPABGAPSVFLPEPPKX	254
QY	428	DTLMSIRPEVATCYVVDVSHSDPEPKFWYIDGCVENNAKTKPREEQNSTYRVVSVLTV	487
DB	255	DTLMSIRPEVATCYVVDVSHSDPEPKFWYIDGCVENNAKTKPREEQNSTYRVVSVLTV	314

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0Y      488 LHDQWLNKGEYCKXNNALPAPIEKTSKAGOPREPOVYTLPPSPBELTNOVSJLCL 547
Db      315 LHODPLNGKEYCKXCKSNALPAPIEKTISKAGOPREPOVYTLPPSDELTNOVSJLCL 374
0Y      548 VKGFYPSDIAVEWSNGOPENNYKTTPTVLSDGSFFLYSKLTVPKSRMOQGNVSCSYM 607
Db      375 VKGFYPSDIAVEWSNGOPENNYKTTPTVLSDGSFFLYSKLTVDKSRHQGNSVSCSYM 434
0Y      608 HEALTHNHYTKSLSLSPG 625
Db      435 HEALTHNHYTKSLSLSPG 452

RESULT 99
US-08-776-511-2
; Sequence 2, Application US/08776511
; Patent No. 6153190
; GENERAL INFORMATION:
; APPLICANT: Young, Peter R.
; APPLICANT: Erickson-Miller, Connie
; TITLE OF INVENTION: Method for Obtaining Receptor Agonist
; TITLE OF INVENTION: Antibodies
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Smithkline Beecham Corporation- Corporate
; STREET: 709 Swedeland Road
; CITY: King of Prussia
; STATE: Pennsylvania
; COUNTRY: USA
; ZIP: 19406-2799
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/776,511
; FILING DATE:
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: Jerryas, Herbert H.
; REGISTRATION NUMBER: 31,171
; REFERENCE/DOCKET NUMBER: SBC P50349-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 610-270-5015
; TELEFAX: 610-270-5090
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 488 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-776-511-2

Query Match          37.1%; Score 1267.5; DB 3; Length 488;
Best Local Similarity 57.8%; Pred No. 6,9e-94;
Matches 275; Conservative 36; Mismatches 88; Indels 77; Gaps 13

0Y      204 FOKASSIIVYKKEGOEVESFPAPFTVEKLTSGLMWQARASSSKSWTF--DIKNREV 261
        :|:::|:-|:-LCFT-ERLEBDLVCFWEBAASGVGPNGVFSYGLEDWM 88
Db      35 FESKAALLAARGPEL-----LPHLITLPQALPQY--AGSGNLTALAEAK 304
        :|:::|:-|:-LPHLITLPQALPQY--AGSGNLTALAEAK 304
0Y      262 SVKRTQTTPQPKLMGKK-----LPHLITLPQALPQY--AGSGNLTALAEAK 304
        :|:::|:-|:-LPHLITLPQALPQY--AGSGNLTALAEAK 304
Db      89 KLCRLHQAPTAAAGAVFWCISLPTADTSSFPLELVTVAASGAPRHHRYIHINEVLLDAP 148
        :|:::|:-|:-ATOLQNKLTCEVWGPTSPKMLSLKENKEAKYSKREP 356
0Y      305 TG---KLHDEVLLVMR-----ATOLQNKLTCEVWGPTSPKMLSLKENKEAKYSKREP 356
        :|:::|:-|:-ATOLQNKLTCEVWGPTSPKMLSLKENKEAKYSKREP 356
Db      149 VGLVARLADESHVVLRMLPPPETMTSTIRIEV-----DVSAQNGAGSVQRVE- 197
        :|:::|:-|:-DVSAQNGAGSVQRVE-----LPTWSTPV----- 394
0Y      357 PVWVINPEAGMQCLISD-SGVLLLESNIKV-----LPTWSTPV----- 394

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Qy	395	----	EPKSCDKHTCPCCPAPELLGGPSVFLFPKPKDITLMISRTPEVTCVVVDVSHED	449	
Db	252	EGRGTEPKSADKHTCPCCPAPELLGGPSVFLFPKPKDITLMISRTPEVTCVVVDVSHED	311		
Qy	450	PEVFNMYVGVENHNAKTKPREQVNSTYRVVSVLTVLHODMVLNGEKYKKVSNKALPA	509		
Db	312	PEVFNMYVGVENHNAKTKPREQVNSTYRVVSVLTVLHODMVLNGEKYKKVSNKALPA	371		
Qy	510	PIEKTISKAKGQPREPPQVYTLPPSRDELITKNQVSLTCLVKGFPYSDIAVEESNGQPENN	569		
Db	372	PIEKTISKAKGQPREPPQVYTLPPSRDELITKNQVSLTCLVKGFPYSDIAVEESNGQPENN	431		
Qy	570	YKTTTTPVLDSGSPFLYSKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPG	625		
Db	432	YKTTTTPVLDSGSPFLYSKLTVDKSRWQGNVFSCSVMHEALHNHYTQKSLSLSPG	487		
RESULT 100					
US-09-131-247-16					
Sequence 16, Application US/09131247					
Patent No. 6294170					
GENERAL INFORMATION:					
APPLICANT: Boone, Thomas C.					
APPLICANT: Herhenson, Susan					
APPLICANT: Bevilacqua, Michael P.					
APPLICANT: Collins, David S.					
TITLE OF INVENTION: COMPOSITION AND METHOD FOR TREATING INFLAMMATORY					
TITLE OF INVENTION: DISEASES					
FILE REFERENCE: A-365F					
CURRENT APPLICATION NUMBER: US/09/131.247					
CURRENT FILING DATE: 1998-08-07					
EARLIER APPLICATION NUMBER: 60/055,185					
EARLIER FILING DATE: 1997-08-08					
EARLIER APPLICATION NUMBER: PCT/US 97/02131					
EARLIER FILING DATE: 1997-02-10					
NUMBER OF SEQ ID NOS: 16					
SOFTWARE: PatentIn Ver. 2.0					
SEQ ID NO 16					
LENGTH: 388					
TYPE: PRT					
ORGANISM: Human					
US-09-131-247-16					
Query Match					
Best Local Similarity 37.1%; Score 1267; DB 3; Length 388;					
Matches 259; Conservative 24; Mismatches 71; Indels 30; Gaps 7;					
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Qy	313	NLVVWRAITQLOKNITCEVWGFTSPKMLSLKLENKEAKVSRKRPVWLVNDEA--GMQOC	370		
Db	80	QLEAVNITDISEN-----RKQDKRFAFIRSDSGPTTSFESAACPWFLLC	123		
Qy	371	LDSGQVLESNK--VLPTW-----SRPVPKSCDKHTTTPPCCPAPELLGGPSVFL	421		
Db	124	TAMADDPVSLTNPNDBGVMTKTFYFOEDEALAAPKSSDKHTTTPCPAPELLGGPSVFL	183		
Qy	422	FPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFPMWYDGVENHNAKTKPREQVNSTYRV	481		
Db	184	FPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFPMWYDGVENHNAKTKPREQVNSTYRV	243		
Qy	482	VSVLTIVLHODMVLNGEKYKKVSNKALPAPIEKTISKAKGQPREPPQVYTLPPSRDELITKNQ	541		
Db	244	VSVLTIVLHODMVLNGEKYKKVSNKALPAPIEKTISKAKGQPREPPQVYTLPPSRDELITKNQ	303		
Qy	542	VSLTCLVKGFPYSDIAVEESNGQPENNYKTTTPPVLDSDGSFFLYSKLTVDKSRWQGNV	601		
Db	304	VSLTCLVKGFPYSDIAVEESNGQPENNYKTTTPPVLDSDGSFFLYSKLTVDKSRWQGNV	363		

Qy 602 FSCSYMHGALHNYTOKSLSPG 625
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Db 364 FSCSYMHGALHNYTOKSLSPG 387
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Search completed: August 3, 2004, 13:16:47
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OM protein - protein search, using sw model

Run on: August 3, 2004, 13:01:34 ; Search time 15.0673 Seconds
(without alignments)
1734.300 Million cell updates/sec

Title: SEQ8
Perfect score: 2702
Sequence: 1 MNRGVPRHLLVLGLALP.....VISFLGLGVACVLARR 512

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 125 summaries

Database : Issued Patente AA: *
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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

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4	2122	78.5	432	3	US-08-485-372A-2
5	2122	78.5	432	4	US-09-409-006A-2
6	2122	78.5	432	4	US-08-484-681-2
7	2122	77.4	432	5	PCT-US93-07422-2
8	2092	77.4	630	4	US-08-472-888A-6
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21	1282.5	47.5	446	3	US-08-397-411-7
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23	1274.5	47.2	454	2	US-07-934-373C-22
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32	1273.5	47.1	622	4	US-09-499-846-2	Sequence 2, Appl
33	1271.5	47.1	453	4	US-09-301-593-18	Sequence 18, Appl
34	1271	47.0	476	3	US-08-487-550-12	Sequence 12, Appl
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37	1265.5	46.8	711	4	US-09-485-737B-90	Sequence 90, Appl
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57	1259	46.6	453	3	US-08-466-163B-8	Sequence 8, Appl
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98	1215	45.0	376	4	US-09-180-100-11	Sequence 11, Appl
99	1215	45.0	376	4	US-09-180-100-22	Sequence 22, Appl
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101 1212 44.9 311 3 US-09-178-869-2 Sequence 2, Appl1
102 1212 44.9 311 4 US-09-761-413-2 Sequence 2, Appl1
103 1211.5 44.8 222 2 US-08-595-043A-50 Sequence 50, Appl1
104 1211.5 44.8 356 2 US-08-784-512-3 Sequence 3, Appl1
105 1211.5 44.8 356 3 US-09-176-228-3 Sequence 7, Appl1
106 1211.5 44.8 859 4 US-09-313-942-7 Sequence 1, Appl1
107 1211.5 44.8 977 4 US-09-590-656-1 Sequence 1, Appl1
108 1211.5 44.8 977 4 US-09-733-764-1 Sequence 1, Appl1
109 1210 44.8 377 4 US-09-227-595-24 Sequence 24, Appl1
110 1207.5 44.7 552 1 US-08-243-010-6 Sequence 6, Appl1
111 1207 44.7 680 3 US-08-227-496C-15 Sequence 15, Appl1
112 1206.5 44.7 388 3 US-09-131-247-16 Sequence 16, Appl1
113 1205.5 44.6 664 3 US-08-957-063-16 Sequence 16, Appl1
114 1205.5 44.6 664 4 US-09-487-685-16 Sequence 16, Appl1
115 1205.5 44.6 664 4 US-08-802-805D-16 Sequence 16, Appl1
116 1205.5 44.6 911 2 US-08-484-438-10 Sequence 10, Appl1
117 1204.5 44.6 235 3 US-09-131-247-6 Sequence 6, Appl1
118 1204.5 44.6 389 3 US-09-131-247-14 Sequence 2, Appl1
119 1203.5 44.5 488 3 US-08-776-511-2 Sequence 14, Appl1
120 1203.5 44.5 559 4 US-09-746-359A-62 Sequence 62, Appl1
121 1203.5 44.5 594 4 US-09-746-359A-23 Sequence 23, Appl1
122 1203 44.5 387 1 US-08-470-399-4 Sequence 4, Appl1
123 1202 44.5 442 1 US-08-480-036-2 Sequence 2, Appl1
124 1202 44.5 442 1 US-08-461-968A-2 Sequence 2, Appl1
125 1202 44.5 442 2 US-08-462-571-2 Sequence 2, Appl1

ALIGNMENTS

RESULT 1
US-08-477-460B-2

Sequence 2, Application US/08477460B
Patent No. 6034223

GENERAL INFORMATION:

APPLICANT: Progenics Pharmaceuticals, Inc.

TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED

TITLE OF INVENTION: CD4-GAMMA2 AND CD4-IGG2 IMMUNOCONJUGATES, AND USES THEREOF

NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESSES:

ADDRESSEE: Cooper & Dunham

STREET: 30 Rockefeller Plaza

CITY: New York

STATE: New York

COUNTRY: USA

ZIP: 10112

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.24

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/477,460B

FILING DATE: 07-JUN-1995

CLASSIFICATION: 530

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/927,931

FILING DATE: 07-AUG-1992

ATTORNEY/AGENT INFORMATION:

NAME: White, John P.

REGISTRATION NUMBER: 28,678

REFERENCE/DOCKET NUMBER: 41215-A-PCT/JWP/ALM

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 977-9550

TELEFAX: (212) 977-9809

TELEX: 422523 COOP UI

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 432 amino acids

TYPE: amino acid

STRANDEDNESS: unknown

TOPOLOGY: unknown

MOLECULE TYPE: protein

ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-08-477-460B-2

Query Match 78.5%; Score 2122; DB 3; Length 432;

Best Local Similarity 91.2%; Pred. No. 7,4e-157;

Matches 405; Conservative 8; Mismatches 5; Indels 26; Gaps 2;

QY 1 MRGVPRHLLIVLQALPPATQGNKVLGKGGTVELCTASQKSIQFMKNSNQIK 60
DB 1 MRGVPRHLLIVLQALPPATQGNKVLGKGGTVELCTASQKSIQFMKNSNQIK 60
QY 61 ILGNQSSFLTGSPSLNDRASRSRLMDOGNPPLIKKLTEDSDTYICEVDQKEEYVL 120
DB 61 ILGNQSSFLTGSPSLNDRASRSRLMDOGNPPLIKKLTEDSDTYICEVDQKEEYVL 120
QY 121 LVFGLTANSDFLLQGGSLITLLESPPSSPSVQCRSPRKNIOGKTLVSQLELODSG 180
DB 121 LVFGLTANSDFLLQGGSLITLLESPPSSPSVQCRSPRKNIOGKTLVSQLELODSG 180
QY 181 TWTCVTLQNGKVEFKIDIV-----PCPAEPKSCDKTHTCPELGGPSVFL 227
DB 181 TWTCVTLQNGKVEFKIDIVLAFERKCCVECPCPAP-----VAGPSVFL 227
QY 228 PPKPKDITMTSRTEPVTCVVDVSHEDPEYKFNYYGVGVHNAKTPREBOVSTRV 287
DB 228 PPKPKDITMTSRTEPVTCVVDVSHEDPEYKFNYYGVGVHNAKTPREBOVSTRV 287
QY 288 VSVLTVLHQMVLNGEKYCKVSNKALPAIEKTIISKAGQPREPOVYTLPPSRDLTKNQ 347
DB 288 VSVLTVLHQMVLNGEKYCKVSNKALPAIEKTIISKAGQPREPOVYTLPPSRDLTKNQ 347
QY 348 VSLTCLVKGFPYSDIAVWESNGQPENNYKTPPYLSDSGSFLYSKLTVDKSRNQGNV 407
DB 348 VSLTCLVKGFPYSDIAVWESNGQPENNYKTPPYLSDSGSFLYSKLTVDKSRNQGNV 407
QY 408 FSCSVMEALHNYTQKSLSLSPG 431
DB 408 FSCSVMEALHNYTQKSLSLSPG 431

RESULT 2
US-08-379-516-2

Sequence 2, Application US/08379516
Patent No. 6083478

GENERAL INFORMATION:

APPLICANT: Allaway, Graham P.

TITLE OF INVENTION: Immunoconjugates and Uses Thereof

TITLE OF INVENTION: Immunoconjugates and Uses Thereof

FILE REFERENCE: 41215-A-PCT-US

CURRENT APPLICATION NUMBER: US/08/379,516

FILING DATE: 1996-06-10

EARLIER APPLICATION NUMBER: PCT/US93/07422

EARLIER FILING DATE: 1993-08-06

EARLIER APPLICATION NUMBER: 07/927,931

EARLIER FILING DATE: 1992-08-07

NUMBER OF SEQ ID NOS: 9

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 2

LENGTH: 432

TYPE: PRT

ORGANISM: Homo sapiens

US-08-379-516-2

Query Match 78.5%; Score 2122; DB 3; Length 432;

Best Local Similarity 91.2%; Pred. No. 7,4e-157;

Matches 405; Conservative 8; Mismatches 5; Indels 26; Gaps 2;

QY 1 MRGVPRHLLIVLQALPPATQGNKVLGKGGTVELCTASQKSIQFMKNSNQIK 60
DB 1 MRGVPRHLLIVLQALPPATQGNKVLGKGGTVELCTASQKSIQFMKNSNQIK 60

QY 61 ILGNQGSFLTGGPSKLNDRADSRSLMDQGNFLLIKNLIKIEDSDTYICEVEDOKEEVOL 120
DB 61 ILGNQGSFLTGGPSKLNDRADSRSLMDQGNFLLIKNLIKIEDSDTYICEVEDOKEEVOL 120
QY 121 LVFGLTANSDBTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDBTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNKQKVEFKIDIV-----PCPAPRPSKCDKHTCTPELLGSPVFL 227
DB 181 TWTCTVLQNKQKVEFKIDIVLAERKCCVECPCPAP-----VAGPSVFL 227
QY 228 FPKPKDITLMSRTPVTCVVDVSHEDPEVKFNMYVDGVEVNAKTKPREEOYNSTYRV 287
DB 228 FPKPKDITLMSRTPVTCVVDVSHEDPEVKFNMYVDGVEVNAKTKPREEOYNSTYRV 287
QY 288 VSVLTVLHODMLNGKCKVSNKGLPAPIEKTISKAGQRPPOVYTLPPSRDELTKNQ 347
DB 288 VSVLTVLHODMLNGKCKVSNKGLPAPIEKTISKAGQRPPOVYTLPPSRDELTKNQ 347
QY 348 VSLTCLVKGFPYPSDIAVEMESNQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMOQGNV 407
DB 348 VSLTCLVKGFPYPSDIAVEMESNQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMOQGNV 407
QY 408 FSCSVNHEALHNNHYTOKSLSLSPG 431
DB 408 FSCSVNHEALHNNHYTOKSLSLSPG 431

RESULT 3

US-09-329-916-2.
Sequence 2, Application US/09329916

Patent No. 6177549

GENERAL INFORMATION:

APPLICANT: Progenics Pharmaceuticals, Inc.

TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONTINGATED

TITLE OF INVENTION: CD4-GAMMA2 AND CD4-IGG2 IMMUNOCONJUGATES, AND USES THEREOF

NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESS:

ADDRESSEE: Cooper & Dunham

STREET: 30 Rockefeller Plaza

CITY: New York

STATE: New York

COUNTRY: USA

ZIP: 10112

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Releasee #1.24

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/329,916

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/477,460

FILING DATE: 07-JUN-1995

APPLICATION NUMBER: US 07/927,931

FILING DATE: 07-AUG-1992

ATTORNEY/AGENT INFORMATION:

NAME: White, John P.

REGISTRATION NUMBER: 28,678

REFERENCE/DOCKET NUMBER: 41215-A-PCT/JWP/AJM

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 977-9550

TELEFAX: (212) 977-9809

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 432 amino acids

TYPE: amino acid

STRANDEDNESS: unknown

TOPOLOGY: unknown
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-09-329-916-2

Query Match 78.5%; Score 2122; DB 3; Length 432;
Best Local Similarity 91.2%; Pred. No. 7.4e-157;
Matches 405; Conservative 8; Mismatches 5; Indels 26; Gaps 2;

QY 1 MRNGVFRHLLVQLALPAATQGNKVVYLGKKGDVTELTCTASQKKSIOFHKNNSQIK 60
DB 1 MRNGVFRHLLVQLALPAATQGNKVVYLGKKGDVTELTCTASQKKSIOFHKNNSQIK 60
QY 61 ILGNQGSFLTGGPSKLNDRADSRSLMDQGNFLLIKNLIKIEDSDTYICEVEDOKEEVOL 120
DB 61 ILGNQGSFLTGGPSKLNDRADSRSLMDQGNFLLIKNLIKIEDSDTYICEVEDOKEEVOL 120
QY 121 LVFGLTANSDBTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDBTHLLQGQSLTLTLSPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNKQKVEFKIDIV-----PCPAPRPSKCDKHTCTPELLGSPVFL 227
DB 181 TWTCTVLQNKQKVEFKIDIVLAERKCCVECPCPAP-----VAGPSVFL 227
QY 228 FPKPKDITLMSRTPVTCVVDVSHEDPEVKFNMYVDGVEVNAKTKPREEOYNSTYRV 287
DB 228 FPKPKDITLMSRTPVTCVVDVSHEDPEVKFNMYVDGVEVNAKTKPREEOYNSTYRV 287
QY 288 VSVLTVLHODMLNGKCKVSNKGLPAPIEKTISKAGQRPPOVYTLPPSRDELTKNQ 347
DB 288 VSVLTVLHODMLNGKCKVSNKGLPAPIEKTISKAGQRPPOVYTLPPSRDELTKNQ 347
QY 348 VSLTCLVKGFPYPSDIAVEMESNQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMOQGNV 407
DB 348 VSLTCLVKGFPYPSDIAVEMESNQPENNYKTPPVLDSDGSFPLYSKLTVDKSRMOQGNV 407
QY 408 FSCSVNHEALHNNHYTOKSLSLSPG 431
DB 408 FSCSVNHEALHNNHYTOKSLSLSPG 431

RESULT 4

US-08-485-372A-2
Sequence 2, Application US/08485372A

Patent No. 6187748

GENERAL INFORMATION:

APPLICANT: Beaudry, Gary A.

TITLE OF INVENTION: Maddon, Paul J.

TITLE OF INVENTION: CD4-GAMMA2 CD4-IGG2 CHIMERAS

NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESS:

ADDRESSEE: Cooper & Dunham LLP

STREET: 1185 Avenue of the Americas

CITY: New York

STATE: New York

COUNTRY: USA

ZIP: 10036

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Releasee #1.24

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/485,372A

FILING DATE:

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/476,227

FILING DATE: 07-JUN-1995

ATTORNEY/AGENT INFORMATION:

NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 37690-II-A
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 278-0400
TELEFAX: (212) 391-0525
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-08-485-372A-2

Query Match 78.5%; Score 2122; DB 3; Length 432;
Best Local Similarity 91.2%; Pred. No. 7,4e-157;
Matches 405; Conservative 8; Mismatches 5; Indels 26; Gaps 2;

QY 1 NMRGVPFRLHLVLOLALPPAATQGNKVLGKKGDTVELTCTASOKKSIQFMKNSNQIX 60
DB 1 NMRGVPFRLHLVLOLALPPAATQGNKVLGKKGDTVELTCTASOKKSIQFMKNSNQIX 60
QY 61 ILGNQGSFLTKGSPSKLNDRAISRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQGSFLTKGSPSKLNDRAISRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLLOGOSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLLOGOSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNKQKVEFKIDIV-----PCPAPPKSCDKTHTCPELLGSPVFL 227
DB 181 TWTCTVLQNKQKVEFKIDIVLAFERKCCVECPCPAP-----VAGPSVFL 227
QY 228 PPPKPKDTLMTSRTPREVTGVVVDVSHEDPEVKFNMYVDGVEVHNAKTKRREQYNSTYRV 287
DB 228 PPPKPKDTLMTSRTPREVTGVVVDVSHEDPEVKFNMYVDGVEVHNAKTKRREQYNSTYRV 287
QY 288 VSVLTVLHODWLNKGEYKCKVSNKALPAIEKTISSAKGQPREPOVYTLPPSRDELTKNQ 347
DB 288 VSVLTVLHODWLNKGEYKCKVSNKALPAIEKTISSAKGQPREPOVYTLPPSRDELTKNQ 347
QY 348 VSLTCLVKGFPYSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYSKLTVDSKRMQGNV 407
DB 348 VSLTCLVKGFPYSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYSKLTVDSKRMQGNV 407
QY 408 FSCSVMHLEALHNHYTQKSLSLSPG 431
DB 408 FSCSVMHLEALHNHYTQKSLSLSPG 431

RESULT 5
US-09-409-006A-2
Sequence 2, Application US/09409006A
Patent No. 6342586
GENERAL INFORMATION:
APPLICANT: Progenics Pharmaceuticals, Inc.
TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
TITLE OF INVENTION: CD4-GAMMA2 AND CD4-IgG2 IMMUNOCONJUGATES, AND USES THEREOF
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10112
COMPUTER READABLE FORM:

MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/409,006A
FILING DATE: 29-SEP-1999
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/927,931
FILING DATE: 07-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPM/AJM
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 977-9550
TELEFAX: (212) 977-9809
TELEX: 422523 COOP UI
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-09-409-006A-2

Query Match 78.5%; Score 2122; DB 4; Length 432;
Best Local Similarity 91.2%; Pred. No. 7,4e-157;
Matches 405; Conservative 8; Mismatches 5; Indels 26; Gaps 2;

QY 1 NMRGVPFRLHLVLOLALPPAATQGNKVLGKKGDTVELTCTASOKKSIQFMKNSNQIX 60
DB 1 NMRGVPFRLHLVLOLALPPAATQGNKVLGKKGDTVELTCTASOKKSIQFMKNSNQIX 60
QY 61 ILGNQGSFLTKGSPSKLNDRAISRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVOL 120
DB 61 ILGNQGSFLTKGSPSKLNDRAISRSLMDQGNPFLIIKNLKIEDSDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLLOGOSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELDQSG 180
DB 121 LVFGLTANSDTHLLOGOSLTLTLESPPGSSPVQCSPPGKNIQGGKTLVSQLELDQSG 180
QY 181 TWTCTVLQNKQKVEFKIDIV-----PCPAPPKSCDKTHTCPELLGSPVFL 227
DB 181 TWTCTVLQNKQKVEFKIDIVLAFERKCCVECPCPAP-----VAGPSVFL 227
QY 228 PPPKPKDTLMTSRTPREVTGVVVDVSHEDPEVKFNMYVDGVEVHNAKTKRREQYNSTYRV 287
DB 228 PPPKPKDTLMTSRTPREVTGVVVDVSHEDPEVKFNMYVDGVEVHNAKTKRREQYNSTYRV 287
QY 288 VSVLTVLHODWLNKGEYKCKVSNKALPAIEKTISSAKGQPREPOVYTLPPSRDELTKNQ 347
DB 288 VSVLTVLHODWLNKGEYKCKVSNKALPAIEKTISSAKGQPREPOVYTLPPSRDELTKNQ 347
QY 348 VSLTCLVKGFPYSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYSKLTVDSKRMQGNV 407
DB 348 VSLTCLVKGFPYSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYSKLTVDSKRMQGNV 407
QY 408 FSCSVMHLEALHNHYTQKSLSLSPG 431
DB 408 FSCSVMHLEALHNHYTQKSLSLSPG 431

RESULT 6
US-08-484-681-2
Sequence 2, Application US/08484681
Patent No. 6451313
GENERAL INFORMATION:

APPLICANT: Beaudry, Gary A.
APPLICANT: Madden, Paul J.
TITLE OF INVENTION: CD4-GAMMA2 CD4-IgG2 CHIMERAS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham LLP
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/484,681
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 37690-II-B
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 278-0400
TELEFAX: (212) 391-0525
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-08-484-681-2

Query Match 78.5%; Score 2122; DB 4; Length 432;
Best Local Similarity 91.2%; Pred. No. 7,4e-157;
Matches 405; Conservative 8; Mismatches 5; Indels 26; Gaps 2;

QY 1 MNRGVPRRHLLVQLALLPAATQGNKVVLGKGGDTVELTCTASQKKSIOFHMKNNSQIK 60
DB 1 MNRGVPRRHLLVQLALLPAATQGNKVVLGKGGDTVELTCTASQKKSIOFHMKNNSQIK 60
QY 61 ILGNQGSFLTKGSPKSLNDRADSRSLMDQGNFPLIINKLIEBDDTYICEVEDQKEEVOL 120
DB 61 ILGNQGSFLTKGSPKSLNDRADSRSLMDQGNFPLIINKLIEBDDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLLQGSQSLTLLTLESPPGSSPSVQCRSPRGKNIQGGKTLSSVQLELDQSG 180
DB 121 LVFGLTANSDTHLLQGSQSLTLLTLESPPGSSPSVQCRSPRGKNIQGGKTLSSVQLELDQSG 180
QY 181 TWTCYVLQONQKVEFKIDIV-----PCPAPEPKSCDKHTTCELLGGSVFL 227
DB 181 TWTCYVLQONQKVEFKIDIVLAFAERKCCVECPCPAP-----VAGPSVFL 227
QY 228 FPPKPKDTLMIISRTPEYTCVVDVSHEDPEVKFNWYVDGVEVNAKTKPREEOYNSTYRV 287
DB 228 FPPKPKDTLMIISRTPEYTCVVDVSHEDPEVKFNWYVDGVEVNAKTKPREEOYNSTYRV 287
QY 288 VSVLTVLHODMLNKEKVKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQ 347
DB 288 VSVLTVLHODMLNKEKVKCKVSNKALPAPIEKTISKAKGQPREPOVYTLPPSRDELTKNQ 347
QY 348 VSLTCLVKGFPSPDIAVEMESNGOPENNKTTPVLDSDGSFFLYSLKLTVDKSRMOQGNV 407
DB 348 VSLTCLVKGFPSPDIAVEMESNGOPENNKTTPVLDSDGSFFLYSLKLTVDKSRMOQGNV 407
QY 408 FSCSVNHEALHNHYTQKSLSLSPG 431

|||||
DB 408 FSCSVNHEALHNHYTQKSLSLSPG 431

RESULT 7
PCT-US93-07422-2
Sequence 2, Application PC/RUS9307422
GENERAL INFORMATION:
APPLICANT: Progenics Pharmaceuticals, Inc.
TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cooper & Dunham
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10112
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/07422
FILING DATE: 19930806
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/927,931
FILING DATE: 07-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 41215-A-PCT/JBW/AJM
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 977-9550
TELEFAX: (212) 977-9809
TELEX: 422523 COOP UT
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
PCT-US93-07422-2

Query Match 78.5%; Score 2122; DB 5; Length 432;
Best Local Similarity 91.2%; Pred. No. 7,4e-157;
Matches 405; Conservative 8; Mismatches 5; Indels 26; Gaps 2;

QY 1 MNRGVPRRHLLVQLALLPAATQGNKVVLGKGGDTVELTCTASQKKSIOFHMKNNSQIK 60
DB 1 MNRGVPRRHLLVQLALLPAATQGNKVVLGKGGDTVELTCTASQKKSIOFHMKNNSQIK 60
QY 61 ILGNQGSFLTKGSPKSLNDRADSRSLMDQGNFPLIINKLIEBDDTYICEVEDQKEEVOL 120
DB 61 ILGNQGSFLTKGSPKSLNDRADSRSLMDQGNFPLIINKLIEBDDTYICEVEDQKEEVOL 120
QY 121 LVFGLTANSDTHLLQGSQSLTLLTLESPPGSSPSVQCRSPRGKNIQGGKTLSSVQLELDQSG 180
DB 121 LVFGLTANSDTHLLQGSQSLTLLTLESPPGSSPSVQCRSPRGKNIQGGKTLSSVQLELDQSG 180
QY 181 TWTCYVLQONQKVEFKIDIV-----PCPAPEPKSCDKHTTCELLGGSVFL 227
DB 181 TWTCYVLQONQKVEFKIDIVLAFAERKCCVECPCPAP-----VAGPSVFL 227
QY 228 FPPKPKDTLMIISRTPEYTCVVDVSHEDPEVKFNWYVDGVEVNAKTKPREEOYNSTYRV 287

Db 228 FPPKPKDTLMISRTPEVTCVVDVSHEDPEVQFNWYDVGVHNAKTKPREQFNSTRFV 287
QY 288 VSVLTVLHODMLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQ 347
Db 288 VSVLTVLHODMLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQ 347
QY 348 VSVLTCLVKGFPYSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYSKLTVDSRMQGNV 407
Db 348 VSVLTCLVKGFPYSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYSKLTVDSRMQGNV 407
QY 408 FSCSVMEALHNHYTQKSLSLSPG 431
Db 408 FSCSVMEALHNHYTQKSLSLSPG 431

RESULT 8
US-08-472-888A-6
; Sequence 6, Application US/08472888A
; Patent No. 6613746
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; APPLICANT: Walz, Gerd
; TITLE OF INVENTION: AGP-ANTIBODY FUSION PROTEINS
; TITLE OF INVENTION: AGP-ANTIBODY FUSION PROTEINS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elding LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472,888A
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/618,314
; FILING DATE: 23-NOV-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: Elding, Karen L.
; REGISTRATION NUMBER: 35,238
; REFERENCE/DOCKET NUMBER: 00786/258001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
; TELEX:
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 630 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-472-888A-6

Query Match 77.4%; Score 2092; DB 4; Length 630;
Best Local Similarity 67.2%; Pred. No. 2.7e-154;
Matches 424; Conservative 0; Mismatches 5; Indels 202; Gaps 5;

QY 1 MNRGVFRRLLLVQLALPAAATQGNKVVLGKGGDTVELTCTASQKKSIOFHKNSNQIK 60
Db 1 MNRGVFRRLLLVQLALPAAATQGNKVVLGKGGDTVELTCTASQKKSIOFHKNSNQIK 60
QY 61 ILGNQGSFLTKGSPSKLNDRASSRSIWDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYDI 120
Db 61 ILGNQGSFLTKGSPSKLNDRASSRSIWDQGNFPLIIKNLKIEDSDTYICEVEDQKEEYDI 120

QY 121 LVFGLTANSDPHLLOGOSLTLLTESPPGSSPSPVOCRSRGRKNIOGKTLVSQLELDQSG 180
Db 121 LVFGLTANSDPHLLOGOSLTLLTESPPGSSPSPVOCRSRGRKNIOGKTLVSQLELDQSG 180
QY 181 TWCTVTLNQKKVEKIDIV----- 200
Db 181 TWCTVTLNQKKVEKIDIVLVAFQKASSIYVKKGEQVEFAPLAFVTEKLTGSGELMW 240
QY 201 ----- 200
Db 241 QAERASSKSWITPDLKNKEVSVKRVTDPKLQMGKLLPLHLTPQALPQVAGSGLTLA 300
QY 201 ----- 200
Db 301 LEAKTGKIHQEVNVLVMAATQLOKNTLCEWGPISPKMLSLIKENKANKSKREKPVV 360
QY 201 -----PC-----PAPBKSCKKTHTC-----PEIL 220
Db 361 LNPEAGMMQCLSDSGVLLBSNLIKPLTWSTPVAHDEGEPEKSCDKTHTCPAPAPELL 420
QY 221 GGPSTVFLPFPKPKDTLMISRTPEVTCVVDVSHEDPEVYFNWYDVGVHNAKTKPREQ 280
Db 421 GGPSTVFLPFPKPKDTLMISRTPEVTCVVDVSHEDPEVYFNWYDVGVHNAKTKPREQ 479
QY 281 YNSTRVVSVLTVLHODMLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR 340
Db 480 YNSTRVVSVLTVLHODMLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR 538
QY 341 DELTRNQVSLTCLVKGFPYSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYSKLTVDS 400
Db 539 DELTRNQVSLTCLVKGFPYSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYSKLTVDS 598
QY 401 RWQGNVFSQSVMEALHNHYTQKSLSLSPG 431
Db 599 RWQGNVFSQSVMEALHNHYTQKSLSLSPG 629

RESULT 9
US-08-477-460B-4
; Sequence 4, Application US/08477460B
; Patent No. 6034223
; GENERAL INFORMATION:
; APPLICANT: Progenics Pharmaceuticals, Inc.
; TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
; TITLE OF INVENTION: CD4-GAMMA2 AND CD4-IGG2 IMMUNOCONJUGATES, AND USES THEREOF
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham
; STREET: 30 Rockefeller Plaza
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10112
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.24
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/477,460B
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/927,931
; FILING DATE: 07-AUG-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPN/AJM
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 977-9550
; TELEFAX: (212) 977-9809
; TELEX: 422523 COOP UI

```

; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 530 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: cDNA
; ORIGINAL SOURCE:
; ORGANISM: homo sapien
; CELL TYPE: lymphocyte
US-08-477-4608-4

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Query Match 77.2%; Score 2085; DB 3; Length 530;
Best Local Similarity 77.3%; Pred. No. 7,4e-154;
Matches 409; Conservative 9; Mismatches 13; Indels 98; Gaps 4;

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QY 1 MNRGVPFRHLILVQLALLPAATGKRVLGKGDVLTCTASQKSIQFHMKNNOIK 60
DB 1 MNRGVPFRHLILVQLALLPAATGKRVLGKGDVLTCTASQKSIQFHMKNNOIK 60
QY 61 ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEVOL 120
DB 61 ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEVOL 120
QY 121 LVFGLTANSPTHLILQGSLLTLTLESPPGSSPVQCRSPRGKNIQGGKTLISVSOLELDQSG 180
DB 121 LVFGLTANSPTHLILQGSLLTLTLESPPGSSPVQCRSPRGKNIQGGKTLISVSOLELDQSG 180
QY 181 TWTCVTIQQNKQKVEFKIDIV-----PCPA-----PEP 207
DB 181 TWTCVTIQQNKQKVEFKIDIV-----PCPA-----PEP 207
QY 208 ----- 207
DB 208 ----- 207
QY 241 VVWSNMSGALTSVHTFPRAVLQSSGLYSLSVTVTPSSNFGTQTYTCNVDHKPSNTKYDK 300
DB 241 VVWSNMSGALTSVHTFPRAVLQSSGLYSLSVTVTPSSNFGTQTYTCNVDHKPSNTKYDK 300
QY 208 ----KSCDKTHTCP-ELLGSPSVFLPPPKPDITLMSRTEPVTCVVVDVSHEDPEVKFNW 262
DB 208 ----KSCDKTHTCP-ELLGSPSVFLPPPKPDITLMSRTEPVTCVVVDVSHEDPEVKFNW 262
QY 301 TVERKCCVCEPCPAPVAVGSAVFLPPPKPDITLMSRTEPVTCVVVDVSHEDPEVKFNW 360
DB 301 TVERKCCVCEPCPAPVAVGSAVFLPPPKPDITLMSRTEPVTCVVVDVSHEDPEVKFNW 360
QY 263 YVDCGEVHNAKTKPREQVNSTRVVSVLTVLHQDWLNGKEYKCKVSNKGLPAPIEKTIS 322
DB 263 YVDCGEVHNAKTKPREQVNSTRVVSVLTVLHQDWLNGKEYKCKVSNKGLPAPIEKTIS 322
QY 361 YVDCGEVHNAKTKPREQVNSTRVVSVLTVLHQDWLNGKEYKCKVSNKGLPAPIEKTIS 420
DB 361 YVDCGEVHNAKTKPREQVNSTRVVSVLTVLHQDWLNGKEYKCKVSNKGLPAPIEKTIS 420
QY 323 KAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTPV 382
DB 323 KAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTPV 382
QY 421 KTKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTPM 480
DB 421 KTKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTPM 480
QY 383 LDSGSEFLYSKLTVDKSRMQQGNVFSCSVMHEALHNHYTQKSLSLSPG 431
DB 383 LDSGSEFLYSKLTVDKSRMQQGNVFSCSVMHEALHNHYTQKSLSLSPG 431
QY 481 LDSGSEFLYSKLTVDKSRMQQGNVFSCSVMHEALHNHYTQKSLSLSPG 529
DB 481 LDSGSEFLYSKLTVDKSRMQQGNVFSCSVMHEALHNHYTQKSLSLSPG 529

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RESULT 10
US-08-379-516-4
; Sequence 4, Application US/08379516
; Patent No. 6083478
; GENERAL INFORMATION:
; APPLICANT: Allaway, Graham P.
; APPLICANT: Maddon, Paul J.
; TITLE OF INVENTION: No. 6083478-Peptideγ1 Molecety-Conjugated CD4-Gamma2 and CD4-IgG2
; TITLE OF INVENTION: Immunocjugates and Uses Thereof
; FILE REFERENCE: 41215-A-PC-T-US/08/379, 516
; CURRENT APPLICATION NUMBER: US/08/379, 516
; EARLIER FILING DATE: 1996-06-10
; EARLIER APPLICATION NUMBER: PCT/US93/07422
; EARLIER FILING DATE: 1993-08-06
; EARLIER APPLICATION NUMBER: 07/927, 931
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 4
; LENGTH: 530

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; TYPE: PRT
; ORGANISM: Homo sapiens
US-08-379-516-4

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Query Match 77.2%; Score 2085; DB 3; Length 530;
Best Local Similarity 77.3%; Pred. No. 7,4e-154;
Matches 409; Conservative 9; Mismatches 13; Indels 98; Gaps 4;

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QY 1 MNRGVPFRHLILVQLALLPAATGKRVLGKGDVLTCTASQKSIQFHMKNNOIK 60
DB 1 MNRGVPFRHLILVQLALLPAATGKRVLGKGDVLTCTASQKSIQFHMKNNOIK 60
QY 61 ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEVOL 120
DB 61 ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFPLIINKLIEDSDTYICEVEDQKEVOL 120
QY 121 LVFGLTANSPTHLILQGSLLTLTLESPPGSSPVQCRSPRGKNIQGGKTLISVSOLELDQSG 180
DB 121 LVFGLTANSPTHLILQGSLLTLTLESPPGSSPVQCRSPRGKNIQGGKTLISVSOLELDQSG 180
QY 181 TWTCVTIQQNKQKVEFKIDIV-----PCPA-----PEP 207
DB 181 TWTCVTIQQNKQKVEFKIDIV-----PCPA-----PEP 207
QY 208 ----- 207
DB 208 ----- 207
QY 241 VVWSNMSGALTSVHTFPRAVLQSSGLYSLSVTVTPSSNFGTQTYTCNVDHKPSNTKYDK 300
DB 241 VVWSNMSGALTSVHTFPRAVLQSSGLYSLSVTVTPSSNFGTQTYTCNVDHKPSNTKYDK 300
QY 208 ----KSCDKTHTCP-ELLGSPSVFLPPPKPDITLMSRTEPVTCVVVDVSHEDPEVKFNW 262
DB 208 ----KSCDKTHTCP-ELLGSPSVFLPPPKPDITLMSRTEPVTCVVVDVSHEDPEVKFNW 262
QY 301 TVERKCCVCEPCPAPVAVGSAVFLPPPKPDITLMSRTEPVTCVVVDVSHEDPEVKFNW 360
DB 301 TVERKCCVCEPCPAPVAVGSAVFLPPPKPDITLMSRTEPVTCVVVDVSHEDPEVKFNW 360
QY 263 YVDCGEVHNAKTKPREQVNSTRVVSVLTVLHQDWLNGKEYKCKVSNKGLPAPIEKTIS 322
DB 263 YVDCGEVHNAKTKPREQVNSTRVVSVLTVLHQDWLNGKEYKCKVSNKGLPAPIEKTIS 322
QY 361 YVDCGEVHNAKTKPREQVNSTRVVSVLTVLHQDWLNGKEYKCKVSNKGLPAPIEKTIS 420
DB 361 YVDCGEVHNAKTKPREQVNSTRVVSVLTVLHQDWLNGKEYKCKVSNKGLPAPIEKTIS 420
QY 323 KAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTPV 382
DB 323 KAKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTPV 382
QY 421 KTKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTPM 480
DB 421 KTKQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTPM 480
QY 383 LDSGSEFLYSKLTVDKSRMQQGNVFSCSVMHEALHNHYTQKSLSLSPG 431
DB 383 LDSGSEFLYSKLTVDKSRMQQGNVFSCSVMHEALHNHYTQKSLSLSPG 431
QY 481 LDSGSEFLYSKLTVDKSRMQQGNVFSCSVMHEALHNHYTQKSLSLSPG 529
DB 481 LDSGSEFLYSKLTVDKSRMQQGNVFSCSVMHEALHNHYTQKSLSLSPG 529

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RESULT 11
US-09-329-916-4
; Sequence 4, Application US/09329916
; Patent No. 6177549
; GENERAL INFORMATION:
; APPLICANT: Progenics Pharmaceuticals, Inc.
; TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham
; STREET: 30 Rockefeller Plaza
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10112
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.24
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/329, 916
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/477, 460
; FILING DATE: 07-JUN-1995

```

APPLICATION NUMBER: US 07/927,931
 FILING DATE: 07-AUG-1992
 ATTORNEY/AGENT INFORMATION:
 NAME: White, John P.
 REGISTRATION NUMBER: 28,678
 REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPM/AJM
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (212) 977-9550
 TELEFAX: (212) 977-9809
 TELEX: 422523 COOP UI
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 530 amino acids
 TYPE: amino acid
 STRANDEDNESS: unknown
 TOPOLOGY: unknown
 MOLECULE TYPE: CDNA
 ORIGINAL SOURCE:
 ORGANISM: homo sapien
 CELL TYPE: lymphocyte
 US-09-329-916-4

Query Match 77.2%; Score 2085; DB 3; Length 530;
 Best Local Similarity 77.3%; Pred. No. 7.4e-154;
 Matches 409; Conservative 9; Mismatches 13; Indels 98; Gaps 4;

QY 1 NMRGVFRLHLLVLOLALPPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHMKNNOIK 60
 DB 1 NMRGVFRLHLLVLOLALPPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHMKNNOIK 60
 QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIINKIKIEDSDTYICEVEDQKEEYVL 120
 DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIINKIKIEDSDTYICEVEDQKEEYVL 120
 QY 121 LVFGILTANSDTHLLOGSLTLTLSPSPSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGILTANSDTHLLOGSLTLTLSPSPSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 121 LVFGILTANSDTHLLOGSLTLTLSPSPSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGILTANSDTHLLOGSLTLTLSPSPSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWTCVTLQNOQKVEFKIDIVLAFASTKGPSVFLPACSRSTSESTALGCLVKDYFPEP 240
 DB 181 TWTCVTLQNOQKVEFKIDIVLAFASTKGPSVFLPACSRSTSESTALGCLVKDYFPEP 240
 QY 208 -----PCPA-----PEP 207
 DB 208 -----PCPA-----PEP 207
 QY 241 VVSNNSGALTSQVHTPPAVLQSSGLYSLSVVTVSSNFGTQTYTCNVDHKPSNTKDX 300
 DB 241 VVSNNSGALTSQVHTPPAVLQSSGLYSLSVVTVSSNFGTQTYTCNVDHKPSNTKDX 300
 QY 208 ----KSCDKHTPC-ELLGSPSVFLPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKFNW 262
 DB 301 TVERKCCVCEPCPAPVAGPSVFLPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKFNW 360
 QY 263 YVDGVEVHNAKTKPREEOYNSTYRVSVLTVLHODMLNGKEYCKVSNKGLPAPIEKTIS 322
 DB 361 YVDGVEVHNAKTKPREEOYNSTYRVSVLTVLHODMLNGKEYCKVSNKGLPAPIEKTIS 420
 QY 323 KAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPV 382
 DB 421 KTKGQPREPOVYTLPPSRDEMTNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPM 480
 QY 383 LQSDGSFPLYSKLTVDKSRMNOGVPSCSMHEALHNHYTQKSLSLSPG 431
 DB 481 LQSDGSFPLYSKLTVDKSRMNOGVPSCSMHEALHNHYTQKSLSLSPG 529

RESULT 12
 US-08-485-372A-4
 ; Sequence 4, Application US/08485372A
 ; Patent No. 6187748
 ; GENERAL INFORMATION:
 ; APPLICANT: Beaudry, Gary A.
 ; APPLICANT: Maddon, Paul J.
 ; TITLE OF INVENTION: CD4-GAMMA2 CD4-1G62 CHIMERAS
 ; NUMBER OF SEQUENCES: 9
 ; CORRESPONDENCE ADDRESS:

ADDRESSEE: Cooper & Dunham LLP
 STREET: 1185 Avenue of the Americas
 CITY: New York
 STATE: New York
 COUNTRY: USA
 ZIP: 10036
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.24
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/485,372A
 FILING DATE:
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 08/476,227
 FILING DATE: 07-JUN-1995
 ATTORNEY/AGENT INFORMATION:
 NAME: White, John P.
 REGISTRATION NUMBER: 28,678
 REFERENCE/DOCKET NUMBER: 37690-II-A
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (212) 278-0400
 TELEFAX: (212) 391-0525
 TELEX:
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 530 amino acids
 TYPE: amino acid
 STRANDEDNESS: unknown
 TOPOLOGY: unknown
 MOLECULE TYPE: CDNA
 ORIGINAL SOURCE:
 ORGANISM: homo sapien
 CELL TYPE: lymphocyte
 US-08-485-372A-4

Query Match 77.2%; Score 2085; DB 3; Length 530;
 Best Local Similarity 77.3%; Pred. No. 7.4e-154;
 Matches 409; Conservative 9; Mismatches 13; Indels 98; Gaps 4;

QY 1 NMRGVFRLHLLVLOLALPPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHMKNNOIK 60
 DB 1 NMRGVFRLHLLVLOLALPPAATQGNKVVLGKKGDTVELTCTASQKKSIOFHMKNNOIK 60
 QY 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIINKIKIEDSDTYICEVEDQKEEYVL 120
 DB 61 ILGNQGSFLTKGPSKLNDRADSRSLMDQGNFPLIINKIKIEDSDTYICEVEDQKEEYVL 120
 QY 121 LVFGILTANSDTHLLOGSLTLTLSPSPSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGILTANSDTHLLOGSLTLTLSPSPSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 121 LVFGILTANSDTHLLOGSLTLTLSPSPSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 DB 121 LVFGILTANSDTHLLOGSLTLTLSPSPSSPVQCRSPRGKNIQGGKTLVSQLELDQSG 180
 QY 181 TWTCVTLQNOQKVEFKIDIVLAFASTKGPSVFLPACSRSTSESTALGCLVKDYFPEP 240
 DB 181 TWTCVTLQNOQKVEFKIDIVLAFASTKGPSVFLPACSRSTSESTALGCLVKDYFPEP 240
 QY 208 -----PCPA-----PEP 207
 DB 208 -----PCPA-----PEP 207
 QY 241 VVSNNSGALTSQVHTPPAVLQSSGLYSLSVVTVSSNFGTQTYTCNVDHKPSNTKDX 300
 DB 241 VVSNNSGALTSQVHTPPAVLQSSGLYSLSVVTVSSNFGTQTYTCNVDHKPSNTKDX 300
 QY 208 ----KSCDKHTPC-ELLGSPSVFLPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKFNW 262
 DB 301 TVERKCCVCEPCPAPVAGPSVFLPPPKPDTLMISRTPEVTCVVVDVSHEDPEVKFNW 360
 QY 263 YVDGVEVHNAKTKPREEOYNSTYRVSVLTVLHODMLNGKEYCKVSNKGLPAPIEKTIS 322
 DB 361 YVDGVEVHNAKTKPREEOYNSTYRVSVLTVLHODMLNGKEYCKVSNKGLPAPIEKTIS 420
 QY 323 KAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPV 382
 DB 421 KTKGQPREPOVYTLPPSRDEMTNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPM 480

QY 383 LDDSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKSLSPG 431
DB 481 LDDSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKSLSPG 529

RESULT 13
US-09-409-006A-4
Sequence 4, Application US/09409006A
Patent No. 6342586
GENERAL INFORMATION:
APPLICANT: Progenics Pharmaceuticals, Inc.
TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
NUMBER OF INVENTION: CD4-GAMMA2 AND CD4-19G2 IMMUNOCONJUGATES, AND USES THEREOF
CORRESPONDENCE ADDRESS: 9
ADDRESS: Cooper & Dunham
STREET: 30 Rockefeller Plaza
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10112

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/409,006A
FILING DATE: 29-SEP-1999
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/927,931
FILING DATE: 07-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPW/AJM
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 977-9550
TELEFAX: (212) 977-9809
TELEX: 422523 COOP UI
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 530 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-09-409-006A-4

Query Match 77.2%; Score 2085; DB 4; Length 530;
Best Local Similarity 77.3%; Pred. No. 7,4e-154;
Matches 409; Conservative 9; Mismatches 13; Indels 98; Gaps 4;

QY 1 MNRGVPFRHLVLVQLALPPATQGNKRVYLGKGGDTVELTCTASQKSIQFHMKNNOIK 60
DB 1 MNRGVPFRHLVLVQLALPPATQGNKRVYLGKGGDTVELTCTASQKSIQFHMKNNOIK 60
QY 61 ILNGQSFLLTKGPKLMDRADSRSLWDQGNFPLINLKIEDDTYICEVEDQKEVOL 120
DB 61 ILNGQSFLLTKGPKLMDRADSRSLWDQGNFPLINLKIEDDTYICEVEDQKEVOL 120
QY 121 LVFGLTANSDTHLLQGSLLTLLSPGSSPSVQCRRPGKNIGQKTLVSVQLELQDSG 180
DB 121 LVFGLTANSDTHLLQGSLLTLLSPGSSPSVQCRRPGKNIGQKTLVSVQLELQDSG 180
QY 181 TWTTCTVLOKQKVEFKIDIV-----PCPA-----PEP 207
DB 181 TWTTCTVLOKQKVEFKIDIVLAFATKGPSVFPLADCSRSTSESTAALCLVVDYFPEP 240

QY 208 ----- 207
DB 241 VTVMNMGALTSQVHTPEPAVLQSSGLXSLSSVTVPESSNFGOTQTYTCNDHKBKNTKYD 300
QY 208 ----KSCDKTHYCP-ELLGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNW 262
DB 301 TVERKCCVECPCPAPVAGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVQFNW 360
QY 263 YVQGVENHNAKTKPREQVNSTRVYVLTVLHODVLMNGEKYCKKSNKGLPAIEKTIIS 322
DB 361 YVQGVENHNAKTKPREQVNSTRVYVLTVLHODVLMNGEKYCKKSNKGLPAIEKTIIS 420
QY 323 KAKQPREPOVYTLPPSRDELTKQVSLTCLVKGFPYSDIAVEMESNGOPENNYKTTIPV 382
DB 421 KTKQPREPOVYTLPPSRDELTKQVSLTCLVKGFPYSDIAVEMESNGOPENNYKTTIPV 480
QY 383 LDDSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKSLSPG 431
DB 481 LDDSGFFLYSKLTVDKSRWQGNVFCSCVMHEALHNHYTKSLSPG 529

RESULT 14
US-08-484-681-4
Sequence 4, Application US/08484681
Patent No. 6451313
GENERAL INFORMATION:
APPLICANT: Beaudry, Gary A.
TITLE OF INVENTION: CD4-GAMMA2 CD4-19G2 CHIMERAS
NUMBER OF INVENTION: 9
CORRESPONDENCE ADDRESS:
ADDRESS: Cooper & Dunham LLP
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.24
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/484,681
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 37690-II-B
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 278-0400
TELEFAX: (212) 391-0525
TELEX:
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 530 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:
ORGANISM: homo sapien
CELL TYPE: lymphocyte
US-08-484-681-4

Query Match 77.2%; Score 2085; DB 4; Length 530;
Best Local Similarity 77.3%; Pred. No. 7,4e-154;
Matches 409; Conservative 9; Mismatches 13; Indels 98; Gaps 4;

QY 1 MNRGVPFRHLVLVQLALPPATQGNKRVYLGKGGDTVELTCTASQKSIQFHMKNNOIK 60
DB 1 MNRGVPFRHLVLVQLALPPATQGNKRVYLGKGGDTVELTCTASQKSIQFHMKNNOIK 60

```

Db      1  MRGVPFRHLLVLQALLPAAATGKQKVVLGKKGDVVELCTASQKKSIOFMKNSNOIK 60
QY      61  ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFPLIIKLIKIEDSDTYICEVEDQKEEVOL 120
        61  ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFPLIIKLIKIEDSDTYICEVEDQKEEVOL 120
QY      121  LVFGLTANSDFHLLQGSLLTLTLESPPGSSPSVQCRSPRGKNIQCGKTLVSQLELDQSG 180
        121  LVFGLTANSDFHLLQGSLLTLTLESPPGSSPSVQCRSPRGKNIQCGKTLVSQLELDQSG 180
Db      181  TWTCVTLQNKQKVEKIDIV-----PCPA-----PP 207
QY      181  TWTCVTLQNKQKVEKIDIV-----PCPA-----PP 207
        181  TWTCVTLQNKQKVEKIDIV-----PCPA-----PP 207
QY      208  -----PP 207
        208  -----PP 207
Db      241  VIVSNMNGALTSQVHTFPAVLQSSGLSYLSVTVTPSSNFGTQTYTCNVDHKPSNTKVDK 300
QY      208  ----KSCDKHTICP-ELIGSPSVFLFPKPKDITLMSRTPEVTCVVDVSHEDPEVKFNW 262
        301  TVERRKCCVCEPCPAPVAGPSVFLFPKPKDITLMSRTPEVTCVVDVSHEDPEVKFNW 360
QY      263  YVDGVEVHNAKTPREEOYNSTYRVSVLTVLHQMNLNGEKYCKVSNKALPAPIEKTIS 322
        361  YVDGVEVHNAKTPREEOYNSTYRVSVLTVLHQMNLNGEKYCKVSNKALPAPIEKTIS 420
Db      323  KAKGPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAMWESNGOPENNYKTPPV 382
        421  KTKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAMWESNGOPENNYKTPPV 480
QY      383  LDSGSEFLYSKLTVDKSRMOQGNVSCSVMEALHNNHTOKSLSLSPG 431
        481  LDSGSEFLYSKLTVDKSRMOQGNVSCSVMEALHNNHTOKSLSLSPG 529

```

RESULT 15

PCT-US93-07422-4

```

; Sequence 4, Application PC/TUS9307422
; GENERAL INFORMATION:
; APPLICANT: Progenics Pharmaceuticals, Inc.
; TITLE OF INVENTION: NON-PEPTIDYL MOIETY-CONJUGATED
; TITLE OF INVENTION: CD4-GAMMA2 AND CD4-1G2 IMMUNOCONJUGATES, AND USES THEREOF
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Cooper & Dunham
; STREET: 30 Rockefeller Plaza
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10112
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent Release #1.24
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/07422
; FILING DATE: 19930806
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/927,931
; FILING DATE: 07-AUG-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: White, John P.
; REGISTRATION NUMBER: 28,678
; REFERENCE/DOCKET NUMBER: 41215-A-PCT/JPM/JM
; TELEPHONE: (212) 977-9550
; TELEFAX: (212) 977-9809
; TELEX: 422523 COOP UI
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 530 amino acids

```

```

; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: cDNA
; ORIGINAL SOURCE:
; ORGANISM: homo sapien
; CELL TYPE: lymphocyte
; PCT-US93-07422-4

```

```

Query Match 77.2%; Score 2085; DB 5; Length 530;
Best Local Similarity 77.3%; Pred. No. 7.4e-154;
Matches 409; Conservative 9; Mismatches 13; Indels 98; Gaps 4;

```

```

QY      1  MRGVPFRHLLVLQALLPAAATGKQKVVLGKKGDVVELCTASQKKSIOFMKNSNOIK 60
Db      1  MRGVPFRHLLVLQALLPAAATGKQKVVLGKKGDVVELCTASQKKSIOFMKNSNOIK 60
QY      61  ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFPLIIKLIKIEDSDTYICEVEDQKEEVOL 120
        61  ILGNQGSFLTKGSPKLNDRADSRSLMDQGNFPLIIKLIKIEDSDTYICEVEDQKEEVOL 120
Db      121  LVFGLTANSDFHLLQGSLLTLTLESPPGSSPSVQCRSPRGKNIQCGKTLVSQLELDQSG 180
        121  LVFGLTANSDFHLLQGSLLTLTLESPPGSSPSVQCRSPRGKNIQCGKTLVSQLELDQSG 180
QY      181  TWTCVTLQNKQKVEKIDIV-----PCPA-----PP 207
        181  TWTCVTLQNKQKVEKIDIV-----PCPA-----PP 207
Db      181  TWTCVTLQNKQKVEKIDIV-----PCPA-----PP 207
QY      208  -----PP 207
        208  -----PP 207
Db      241  VIVSNMNGALTSQVHTFPAVLQSSGLSYLSVTVTPSSNFGTQTYTCNVDHKPSNTKVDK 300
QY      208  ----KSCDKHTICP-ELIGSPSVFLFPKPKDITLMSRTPEVTCVVDVSHEDPEVKFNW 262
        301  TVERRKCCVCEPCPAPVAGPSVFLFPKPKDITLMSRTPEVTCVVDVSHEDPEVKFNW 360
Db      301  TVERRKCCVCEPCPAPVAGPSVFLFPKPKDITLMSRTPEVTCVVDVSHEDPEVKFNW 360
QY      263  YVDGVEVHNAKTPREEOYNSTYRVSVLTVLHQMNLNGEKYCKVSNKALPAPIEKTIS 322
        361  YVDGVEVHNAKTPREEOYNSTYRVSVLTVLHQMNLNGEKYCKVSNKALPAPIEKTIS 420
Db      361  YVDGVEVHNAKTPREEOYNSTYRVSVLTVLHQMNLNGEKYCKVSNKALPAPIEKTIS 420
QY      323  KAKGPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAMWESNGOPENNYKTPPV 382
        421  KTKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAMWESNGOPENNYKTPPV 480
Db      421  KTKGQPREPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDIAMWESNGOPENNYKTPPV 480
QY      383  LDSGSEFLYSKLTVDKSRMOQGNVSCSVMEALHNNHTOKSLSLSPG 431
        481  LDSGSEFLYSKLTVDKSRMOQGNVSCSVMEALHNNHTOKSLSLSPG 529

```

RESULT 16

US-08-630-172-17

```

; Sequence 17, Application US/08630172
; Patent No. 6060054
; GENERAL INFORMATION:
; APPLICANT: Straetz, Uwe
; TITLE OF INVENTION: NOVEL PRODUCT AND PROCESS FOR T
; TITLE OF INVENTION: LYMPHOCYTE VETO
; NUMBER OF SEQUENCES: 41
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sheridan Rose & McIntosh
; STREET: 1700 Lincoln Street, 35th Floor
; CITY: Denver
; STATE: Colorado
; COUNTRY: U.S.
; ZIP: 80203
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/630,172

```



```

; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Connell, Gary J.
; REGISTRATION NUMBER: 32,020
; REFERENCE/DOCKET NUMBER: 2879-36
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (303) 863-9700
; TELEFAX: (303) 863-0223
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 410 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-630-172-17

Query Match          61.0%; Score 1647.5; DB 3; Length 410;
Best Local Similarity 75.8%; Pred. No. 5.1e-120;
Matches 316; Conservative 31; Mismatches 51; Indels 19; Gaps 4;

QY 26 NKVVLGKGGDTVELTCTASQKSIQPHMKNSNOIKILGNQGSFLTKGPSKLNDRADSRRS 85
DB 1 NKVVLGKGGDTVELTCTASQKSIQPHMKNSNOIKILGNQGSFLTKGPSKLNDRADSRRS 60
QY 86 LMDQGNFPLIIKLIKIEDSDTYICEVEDQKEEVQVLVFGLTANSDDLHLOGSLTTLLES 145
DB 61 LMDQGNFPLIIKLIKIEDSDTYICEVEDQKEEVQVLVFGLTANSDDLHLOGSLTTLLES 120
QY 146 PPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWCTVLOKQKVEKIDIV----- 200
DB 121 PPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWCTVLOKQKVEKIDIVLAEP 180
QY 201 -----PCPAPBEPSCDKHTCPCLLGSPVFLPPPKPDTLMISRPEVTCVAVVDSHE 254
DB 181 RGPTRKCP---PCKC----PAPNLGGPSVFLPPPKIDVLMISPIVTCVAVVDS 233
QY 255 DPEVKENMYVDGVEVNAKTKPREEQYNSTYRVSVLTVLHODMLNGEKYCKVSNKALP 314
DB 234 DPEVQISMVFNVEVHTAQOTHRREDYNSRLRVVSALPIQHODMMSKEKCKVNNKDL 293
QY 315 APIEKTISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFPYSDIAVEMESNQOPEN 374
DB 294 APIERTISKPKGSVRAPQVYVLP--EEMTKKQVTLTCVTDPMEDIVYEMTNNGKTEL 352
QY 375 NYKTPPVLDSDGSFFLYSKLTVDKSRMOQGNVFCSCVWHEALHNHYTQKSLSLSPG 431
DB 353 NYKTEPVLDSDGSFFMYSKLVRVEKKNWERNYSYSCVWHEGLHNHTTKSFSRTPG 409

RESULT 17
US-09-375-419-17
; Sequence 17, Application US/09375419
; Patent No. 6264950
; GENERAL INFORMATION:
; APPLICANT: Staerz, Uwe
; TITLE OF INVENTION: NOVEL PRODUCT AND PROCESS FOR T
; NUMBER OF SEQUENCES: 41
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sheridan Ross & McIntosh
; STREET: 1700 Lincoln Street, 35th Floor
; CITY: Denver
; STATE: Colorado
; COUNTRY: U.S.
; ZIP: 80203
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/375,419
```

```

; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/630,172
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Connell, Gary J.
; REGISTRATION NUMBER: 32,020
; REFERENCE/DOCKET NUMBER: 2879-36
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (303) 863-9700
; TELEFAX: (303) 863-0223
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 410 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-375-419-17

Query Match          61.0%; Score 1647.5; DB 3; Length 410;
Best Local Similarity 75.8%; Pred. No. 5.1e-120;
Matches 316; Conservative 31; Mismatches 51; Indels 19; Gaps 4;

QY 26 NKVVLGKGGDTVELTCTASQKSIQPHMKNSNOIKILGNQGSFLTKGPSKLNDRADSRRS 85
DB 1 NKVVLGKGGDTVELTCTASQKSIQPHMKNSNOIKILGNQGSFLTKGPSKLNDRADSRRS 60
QY 86 LMDQGNFPLIIKLIKIEDSDTYICEVEDQKEEVQVLVFGLTANSDDLHLOGSLTTLLES 145
DB 61 LMDQGNFPLIIKLIKIEDSDTYICEVEDQKEEVQVLVFGLTANSDDLHLOGSLTTLLES 120
QY 146 PPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWCTVLOKQKVEKIDIV----- 200
DB 121 PPGSSPSVQCRSPRGKNIQGGKTLVSQLELDQSGTWCTVLOKQKVEKIDIVLAEP 180
QY 201 -----PCPAPBEPSCDKHTCPCLLGSPVFLPPPKPDTLMISRPEVTCVAVVDSHE 254
DB 181 RGPTRKCP---PCKC----PAPNLGGPSVFLPPPKIDVLMISPIVTCVAVVDS 233
QY 255 DPEVKENMYVDGVEVNAKTKPREEQYNSTYRVSVLTVLHODMLNGEKYCKVSNKALP 314
DB 234 DPEVQISMVFNVEVHTAQOTHRREDYNSRLRVVSALPIQHODMMSKEKCKVNNKDL 293
QY 315 APIEKTISKAKGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFPYSDIAVEMESNQOPEN 374
DB 294 APIERTISKPKGSVRAPQVYVLP--EEMTKKQVTLTCVTDPMEDIVYEMTNNGKTEL 352
QY 375 NYKTPPVLDSDGSFFLYSKLTVDKSRMOQGNVFCSCVWHEALHNHYTQKSLSLSPG 431
DB 353 NYKTEPVLDSDGSFFMYSKLVRVEKKNWERNYSYSCVWHEGLHNHTTKSFSRTPG 409

RESULT 18
US-08-284-391B-33
; Sequence 33, Application US/08284391B
; Patent No. 5851828
; GENERAL INFORMATION:
; APPLICANT: Seed, Brian
; APPLICANT: Banapour, Babak
; APPLICANT: Romeo, Charles
; APPLICANT: Kojanne, Waldemar
; TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
```

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/284,391B
FILING DATE: 02-AUG-1994
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/195,395
FILING DATE: 14-FEB-1994
APPLICATION NUMBER: 07/847,566
FILING DATE: 06-MAR-1992
APPLICATION NUMBER: 07/665,961
FILING DATE: 07-MAR-1991
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/247001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
TELEX:
INFORMATION FOR SEQ ID NO: 33:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-284-391B-33

Query Match 49.5%; Score 1338.5; DB 2; Length 254;
Best Local Similarity 98.0%; Pred. No. 2.7e-96;
Matches 249; Conservative 0; Mismatches 0; Indels 5; Gaps 1;

QY 206 EPKSCDKTHTC-----PELLGSPSVFLPPPKKDTLMISRPPEVTCVVVDVSHEDPEVKF 260
DB 1 EPKSCDKTHTCPCCPAPPELLGSPSVFLPPPKKDTLMISRPPEVTCVVVDVSHEDPEVKF 60
QY 261 NMVYDGEVHNNAKTRPEQYNSTYRVSVLTIVLHQMVLNGKEYCKVSNKALPAPIEKT 320
DB 61 NMVYDGEVHNNAKTRPEQYNSTYRVSVLTIVLHQMVLNGKEYCKVSNKALPAPIEKT 120
QY 321 ISKAGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFTPSDIAVWESNGQPENNYKTT 380
DB 121 ISKAGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFTPSDIAVWESNGQPENNYKTT 180
QY 381 PVLDSGSPFLYSKLTVDKSRMOQGNVFCSCVMHIALHNYTKSLSPGLQDETCAE 440
DB 181 PVLDSGSPFLYSKLTVDKSRMOQGNVFCSCVMHIALHNYTKSLSPGLQDETCAE 240
QY 441 AODGELDGLMTTDP 454
DB 241 AODGELDGLMTTDP 254

RESULT 19
US-09-218-950-33
Sequence 33, Application US/09218950
Patent No. 6284240
GENERAL INFORMATION:
APPLICANT: Seed, Brian
APPLICANT: Banapour, Babak
APPLICANT: Romeo, Charles
APPLICANT: Kolanue, Waldemar
TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
TITLE OF INVENTION: CELLS BY CHIMERIC CD4 RECEPTOR-BEARING CELLS
NUMBER OF SEQUENCES: 53
CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elbing LLP
STREET: 176 Federal Street
CITY: Boston

STATE: MA
COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/218,950
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/284,391
FILING DATE: 02-AUG-1994
APPLICATION NUMBER: 08/195,395
FILING DATE: 14-FEB-1994
APPLICATION NUMBER: 07/847,566
FILING DATE: 06-MAR-1992
APPLICATION NUMBER: 07/665,961
FILING DATE: 07-MAR-1991
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L.
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/247001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-0200
TELEFAX: 617-428-7045
TELEX:
INFORMATION FOR SEQ ID NO: 33:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-218-950-33

Query Match 49.5%; Score 1338.5; DB 3; Length 254;
Best Local Similarity 98.0%; Pred. No. 2.7e-96;
Matches 249; Conservative 0; Mismatches 0; Indels 5; Gaps 1;

QY 206 EPKSCDKTHTC-----PELLGSPSVFLPPPKKDTLMISRPPEVTCVVVDVSHEDPEVKF 260
DB 1 EPKSCDKTHTCPCCPAPPELLGSPSVFLPPPKKDTLMISRPPEVTCVVVDVSHEDPEVKF 60
QY 261 NMVYDGEVHNNAKTRPEQYNSTYRVSVLTIVLHQMVLNGKEYCKVSNKALPAPIEKT 320
DB 61 NMVYDGEVHNNAKTRPEQYNSTYRVSVLTIVLHQMVLNGKEYCKVSNKALPAPIEKT 120
QY 321 ISKAGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFTPSDIAVWESNGQPENNYKTT 380
DB 121 ISKAGQPREPQVYTLPPSRDELTKNOVSLTCLVKGFTPSDIAVWESNGQPENNYKTT 180
QY 381 PVLDSGSPFLYSKLTVDKSRMOQGNVFCSCVMHIALHNYTKSLSPGLQDETCAE 440
DB 181 PVLDSGSPFLYSKLTVDKSRMOQGNVFCSCVMHIALHNYTKSLSPGLQDETCAE 240
QY 441 AODGELDGLMTTDP 454
DB 241 AODGELDGLMTTDP 254

RESULT 20
US-08-157-101A-7
Sequence 7, Application US/08157101A
Patent No. 5808032
GENERAL INFORMATION:
APPLICANT: KURIHARA, TATSUYA
APPLICANT: MATSUKURA, SHIGEKAZU
APPLICANT: TSURUOKA, NOBUO
APPLICANT: ARIMA, KENJI
APPLICANT: NISHIHARA, TATSURO

```

: TITLE OF INVENTION: ANTI-HBs ANTIBODY GENES AND EXPRESSION
: TITLE OF INVENTION: PLASMIDS THEREFOR
: NUMBER OF SEQUENCES: 9
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: PILLSBURY, MADISON & SUTRO
: STREET: 1100 NEW YORK AVENUE, N.W.
: CITY: WASHINGTON
: STATE: D.C.
: COUNTRY: USA
: ZIP: 20005
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patent in Release #1.0, Version #1.25
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/157,101A
: FILING DATE: 05-APR-1994
: CLASSIFICATION: 530
: ATTORNEY/AGENT INFORMATION:
: NAME: TITUS, MARLANA K
: REGISTRATION NUMBER: 35843
: REFERENCE/DOCKET NUMBER: 9437/204199
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 202-861-3711
: TELEFAX: 202-822-0944
: TELEX: 6714627 CUCH
: INFORMATION FOR SEQ ID NO: 7:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 459 amino acids
: TYPE: amino acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: peptide
: US-08-157-101A-7

```

```

Query Match      47.5%; Score 1284.5; DB 1; Length 459;
Best Local Similarity 59.4%; Pred. No. 9,7e-92;
Matches 280; Conservative 30; Mismatches 68; Indels 93; Gaps 17;

QY 25 GNRKVLGKGGDTVELTCTAS--QKSIQIFHW-----KNSNQIKIL--GNQGSFL--TK 71
DB 17 GGGV--QPSRLRLSCAASGFTSSNSMHWRAQPKGLEWAVILYDGNHKKFYADSVK 74
QY 72 GPSKLNDRADRSRLMGOQNFLLIKLKIEDSDTYICEVEDQKEVQLLVFGITANSDT 131
DB 75 GRFTIS-RDMSKNTLY-----LEVKSLOQTEDTGVVYC-IRDQ-----TYGV----- 113
QY 132 HLLQ--GQSLTLTLESPSPSSPVQCRSPRKNIOG-----KTLSVS----- 172
DB 114 HRDSDMQGTLVYSSASTGSPVFLAPSSKSTSGTALGCLVMDYFPEPVTVSNNG 173
QY 173 -----QLELDQSG-----TWCTVLONOKKVEFKIDIVPCPAP 205
DB 174 ALASGVATPRAVLQSSGLYSLSSVTVVPSSSLGTQTYICNV--NHKSNTKVD---KKV 227
QY 206 EPPSCDTHTC-----PELLGSPSVFLPPPKPDTLMISTRPEVTCVVVDVSHEDPEVK 260
DB 228 EPPSCDTHTCPPCPAPPELLGSPSVFLPPPKPDTLMISTRPEVTCVVVDVSHEDPEVK 287
QY 261 NMVYDGEVHNNAKTKPREEOYNSTRYRVSVLTVLHODMLNGKCKVSNKALPAPIEKT 320
DB 288 NMVYDGEVHNNAKTKPREEOYNSTRYRVSVLTVLHODMLNGKCKVSNKALPAPIEKT 347
QY 321 ISRAKQPREPOVYTLPPSRDELTKQVSLTCLVKGFPYSDIAVEMESNQEPENNYKTP 380
DB 348 ISRAKQPREPOVYTLPPSRDELTKQVSLTCLVKGFPYSDIAVEMESNQEPENNYKTP 407
QY 381 PVLDSOSFFLYSKLTVDKSRMOQGNVSCSVHMEALHNHYTQKSLSLSPG 431
DB 408 PVLDSOSFFLYSKLTVDKSRMOQGNVSCSVHMEALHNHYTQKSLSLSPG 458

```

```

RESULT 21
US-08-397-411-7
: Sequence 7; Application US/08397411
: Patent No. 6129914
: GENERAL INFORMATION:
: APPLICANT: Weiner, George
: APPLICANT: Gingrich, Roger
: APPLICANT: Link, Brian
: APPLICANT: Tso, J. Yun
: TITLE OF INVENTION: Bispecific Antibody Effective to Treat
: TITLE OF INVENTION: B-Cell Lymphoma and Cell Line
: NUMBER OF SEQUENCES: 14
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Townsend and Townsend and Crew
: STREET: One Market Plaza, Steuart Tower, Suite 2000
: CITY: San Francisco
: STATE: California
: COUNTRY: USA
: ZIP: 94105
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patent in Release #1.0, Version #1.25
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/397,411
: FILING DATE: 01-MAR-1995
: CLASSIFICATION: 424
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/859,583
: FILING DATE: 27-MAR-1992
: ATTORNEY/AGENT INFORMATION:
: NAME: Smith, William M.
: REGISTRATION NUMBER: 30,223
: REFERENCE/DOCKET NUMBER: 011823-004901
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 415-326-2400
: TELEFAX: 415-326-2422
: INFORMATION FOR SEQ ID NO: 7:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 446 amino acids
: TYPE: amino acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: peptide
: US-08-397-411-7

```

```

Query Match      47.5%; Score 1282.5; DB 3; Length 446;
Best Local Similarity 59.8%; Pred. No. 1.3e-91;
Matches 274; Conservative 25; Mismatches 80; Indels 79; Gaps 10;

QY 30 LGRKGGDTVELTCTAQSQKSIQF--HWKNSNQIKILGNQGSFLTKGPSKLNDRADRSRL 86
DB 11 LVKPSFTLSLTCTVSGFSLTNVGVHWVROSQKGLWIGVKNKSGSTEVAAATISRLTIS 70
QY 87 --WDQGNFLLIKLKIEDSDTYICEVEDQKEVQLLVGTLNSTHLLQ--GQSLTLT 142
DB 71 KQTSKQVSSIKNSLTPADTAAYVC-----ARNDRYAMDYWGQGTLYT 113
QY 143 LSPSPSSPVQCRSPRKNIOG-----KTLSVS-----QLEL 176
DB 114 VSSASTKGPSVFLAPSSKSTSGTALGCLVMDYFPEPVTVSNNGALTSQVHTPPAVL 173
QY 177 QDSG-----TWCTVLONOKKVEFKIDIVPCPAPERSCDKTHTC-- 216
DB 174 QSSGLYSLSSVTVVPSSSLGTQTYICNV--NHKPSNTKVD---KVEPSKCDKTHTC 227
QY 217 ---PELLGSPSVFLPPPKPDTLMISTRPEVTCVVVDVSHEDPEVKFNMYVDGEVHNNAK 273
DB 228 CPAPELLGSPSVFLPPPKPDTLMISTRPEVTCVVVDVSHEDPEVKFNMYVDGEVHNNAK 287
QY 274 TKPREOYNSTRYRVSVLTVLHODMLNGKCKVSNKALPAPIEKTISRAKQPREPOV 333

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Db      288 TKREBQVNSTYRVSVLTVLHQMNLNGKCKVSNKALPAPIETISKAGQPREPV 347
Qy      334 YTLPPSRDELTKQVSLTCLVKGFFYPSDIAVEMESGQENNYKTPPVLDSGFFLYS 393
Db      348 YTLPPSRDELTKQVSLTCLVKGFFYPSDIAVEMESGQENNYKTPPVLDSGFFLYS 407
Qy      394 KLTVDKSRWQGNVFCSCVMEALNHNHYOKSLSLSPG 431
Db      408 KLTVDKSRWQGNVFCSCVMEALNHNHYOKSLSLSPG 445

RESULT 22
US-09-740-002-25
; Sequence 25, Application US/09740002
; Patent No. 6537809
; GENERAL INFORMATION:
; APPLICANT: BRAMS, PETER
; APPLICANT: MORROW, PHILLIP
; TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES
; TITLE OF INVENTION: SPECIFIC TO RSV F-PROTEIN AND METHODS FOR THEIR
; TITLE OF INVENTION: MANUFACTURE AND THERAPEUTIC USE THEREOF
; FILE REFERENCE: 037003-0275759
; CURRENT APPLICATION NUMBER: US/09/740,002
; PRIOR FILING DATE: 2000-12-20
; PRIOR APPLICATION NUMBER: 09/335,697
; PRIOR FILING DATE: 1999-06-18
; PRIOR APPLICATION NUMBER: 08/488,376
; PRIOR FILING DATE: 1995-06-07
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: Patent In Ver. 2.1
; LENGTH: 475
; SEQ ID NO 25
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-740-002-25

Query Match      47.2%; Score 1276.5; DB 4; Length 475;
Best Local Similarity 57.1%; Pred. No. 4.3e-91;
Matches 281; Conservative 27; Mismatches 87; Indels 97; Gaps 12;

Qy      10 LLLVLQALLPAATGKGNKVLGKGGDTVELTCTAS-----QKKSIOFHWK 54
      10 LVAVATRVLSQVLOSGPVVAVKPTFTLTLCTVSGFSLSNPRMGVTWRQPPGKALEN- 68
Qy      55 NSNQIKILGN-----QGSFLTKGPSLUNDRAISRRLMDQGNPPLIKKUKIEDSTYIC 109
      69 -----LGNIFSSDKSFSPSLKSRLLTSQDTSRS-----QVVLSTLVWDVPDTATYYC 116
Qy      110 EVEDQKEVQLVFGLTANSDDL-LQGSGLTLVTLSPGSSPSVQCRSPRGKNIQG-- 166
      117 -----ARGLIYDINAIYLYLDYWGQGTTLVTSASATKGPSVFLPLAPSSKSTSGGTA 168
Qy      167 -----KTLVS-----QLELDQSG-----TWTC 184
      169 ALGCLVQDYFPEPEVTATSNMNGALTSGVHPRPAVLQSGGLYSLSSVTVTPSSSLGTQYIC 228
Qy      185 TVLQNGKQVEFKIDIVPCAPAPKSCDKTHTC-----PELLGSPSFLPPPKKDTLMS 239
      229 NV--NKKPSNTKVD-----KKAEPKSCDKTHTCPPCAPAPLGGPSVFLPPPKKDTLMS 282
Qy      240 RPEEVTCVVVDVSHEDPEVKFNMYVDGVEVHNKATKPREQVSTYRVSVLTVLHQMNL 299
      283 RPEEVTCVVVDVSHEDPEVKFNMYVDGVEVHNKATKPREQVSTYRVSVLTVLHQMNL 342
Qy      300 NGKEYCKVSNKALPAPIETISKAGQPREPVYTLPPSRDELTKQVSLTCLVKGFFY 359
      343 NGKEYCKVSNKALPAPIETISKAGQPREPVYTLPPSRDELTKQVSLTCLVKGFFY 402
Qy      360 SDIAVEMESGQENNYKTPPVLDSGFFLYSKLTVDKSRWQGNVFCSCVMEALN 419
      403 SDIAVEMESGQENNYKTPPVLDSGFFLYSKLTVDKSRWQGNVFCSCVMEALN 462
Qy      420 HTYOKSLSLSPG 431

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Db      463 HTYOKSLSLSPG 474

RESULT 23
US-07-934-373C-22
; Sequence 22, Application US/07934373C
; Patent No. 5821317
; GENERAL INFORMATION:
; APPLICANT: Paul J. Carter
; APPLICANT: Leonard G. Presta
; TITLE OF INVENTION: Immunoglobulin Variants
; NUMBER OF SEQUENCES: 48
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Winpatin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/934,373C
; FILING DATE: 21-Aug-1992
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US92/05126
; FILING DATE: 15-JUN-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/715272
; FILING DATE: 14-JUN-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Lee, Wendy M.
; REGISTRATION NUMBER: 40,378
; REFERENCE/DOCKET NUMBER: P0709P2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-9894
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 454 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
US-07-934-373C-22

Query Match      47.2%; Score 1274.5; DB 2; Length 454;
Best Local Similarity 59.9%; Pred. No. 5.7e-91;
Matches 275; Conservative 24; Mismatches 87; Indels 73; Gaps 11;

Qy      30 LKKKGDVVELTCTASQKKSIOF--HMKNSNQIKILGNQGSFLTK-GPSKLANDRAISRSL 86
      11 LVKPGASVKISCKTSKGYFTFTYTMNMKQSHKSLKLEWIGFAPKNGGSHNRFPMDKATL 70
Qy      87 ---WDQGNPPLIKKUKIEDSDTYICEVEDQKEVQLVFGLTANSDDLLO--GQSLTL 141
      71 AVDKSTAYMELRSLTSEDGIIYCC-----ARWRGLNYGFDRYFPDVGAGTTV 120
Qy      142 TLESPPGSSPSVQCSPPRGKNIQG-----KTLVS-----QLE 175
      121 TVSSASTGPSVFLPLAPSSKSTSGGTAALGCLVQDYFPEPEVTATSNMNGALTSGVHPRPAV 180
Qy      176 LQDSG-----TWTCVTLQNGKQVEFKIDIVPCAPAPKSCDKTHTC- 216
      181 LQSGGLYSLSSVTVTPSSSLGTQYICNV--NKKPSNTKVD-----KKAEPKSCDKTHTC 234
Qy      217 ---PELLGSPSFLPPPKKDTLMSIRTEVTCVVVDVSHEDPEVKFNMYVDGVEVHNA 272
      235 PCPABELLGGPSVFLPPPKKDTLMSIRTEVTCVVVDVSHEDPEVKFNMYVDGVEVHNA 294

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QY 30 LKKGDTVELTCTASQKSIQF--HWKNSNOIKILGNQSPFLTK--GPSKLNDRADSRRL 86
DB 11 LKPGASVAKISCKTSYTFTEYTHMMKSHGKSLWIGFPPKNGGSSHNORFMDKATL 70
QY 87 ---WDQGNPLIIKLIKIEDSDTYICEVEDQKEVQLVFGLTANSDFHLQ--GQSFLT 141
DB 71 AVDKSTSTAYMELRLTSEDSGIYTC-----ARWRGLNYGFDVRYFDVMGAGTIV 120
QY 142 TLESPPGSSPSVQCRPRGKNIQGG-----KTLSSV-----QLE 175
DB 121 TVSSASTKGPSVFLPRLAPSSKSTSGCTALGCLVKDYFPEPVYVSNNSGALTSGVHTFPAV 180
QY 176 LQDSG-----TWCTVLONOKKVEFKIDIVPCPAPKSCDKTHTC- 216
DB 181 LQSSGLYLSLSVYTVVSSSLGTQTYICNV--NHKPSNTKVD---KVEPKSCDKTHTC 234
QY 217 ---PELLGGPSVFLPRLPKDPTLMISTRPEVTCVVVDVSHEDPEVKFMWYDGVENHA 272
DB 235 PCPAPPELLGGPSVFLPRLPKDPTLMISTRPEVTCVVVDVSHEDPEVKFMWYDGVENHA 294
QY 273 KTKPREEOYNSTYRVSVLTVLHQMNLNGKEYCKVSNKALPAPIEKTIISKAKGQPREPQ 332
DB 295 KTKPREEOYNSTYRVSVLTVLHQMNLNGKEYCKVSNKALPAPIEKTIISKAKGQPREPQ 354
QY 333 VYTLPPSRDELTKNOVSLTCLVKGFPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLY 392
DB 355 VYTLPPSRDEMTKNOVSLTCLVKGFPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLY 414
QY 393 SKLTVDKSRMOQGNVFCSCVMHEALHNHYTOKSLSPG 431
DB 415 SKLTVDKSRMOQGNVFCSCVMHEALHNHYTOKSLSPG 453

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RESULT 26
US-09-705-686-22
; Sequence 22, Application US/09705686
; Patent No. 6639055
; GENERAL INFORMATION:
; APPLICANT: Carter, Paul J.
; Presta, Leonard G.
; TITLE OF INVENTION: Method for Making Humanized Antibodies
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WinPatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/705,686
; FILING DATE: 02-NOV-1993
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/146206
; FILING DATE: 17-NOV-1993
; APPLICATION NUMBER: 07/715272
; FILING DATE: 14-JUN-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Lee, Wendy M.
; REGISTRATION NUMBER: 40,378
; REFERENCE/DOCKET NUMBER: P0709P1D3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-1994
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:

```

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; LENGTH: 454 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 22:
US-09-705-686-22

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Query Match 47.2%; Score 1274.5; DB 4; Length 454;
Best Local Similarity 59.9%; Pred. No. 5,7e-91;
Matches 275; Conservative 24; Mismatches 87; Indels 73; Gaps 11;

```

```

QY 30 LKKGDTVELTCTASQKSIQF--HWKNSNOIKILGNQSPFLTK--GPSKLNDRADSRRL 86
DB 11 LKPGASVAKISCKTSYTFTEYTHMMKSHGKSLWIGFPPKNGGSSHNORFMDKATL 70
QY 87 ---WDQGNPLIIKLIKIEDSDTYICEVEDQKEVQLVFGLTANSDFHLQ--GQSFLT 141
DB 71 AVDKSTSTAYMELRLTSEDSGIYTC-----ARWRGLNYGFDVRYFDVMGAGTIV 120
QY 142 TLESPPGSSPSVQCRPRGKNIQGG-----KTLSSV-----QLE 175
DB 121 TVSSASTKGPSVFLPRLAPSSKSTSGCTALGCLVKDYFPEPVYVSNNSGALTSGVHTFPAV 180
QY 176 LQDSG-----TWCTVLONOKKVEFKIDIVPCPAPKSCDKTHTC- 216
DB 181 LQSSGLYLSLSVYTVVSSSLGTQTYICNV--NHKPSNTKVD---KVEPKSCDKTHTC 234
QY 217 ---PELLGGPSVFLPRLPKDPTLMISTRPEVTCVVVDVSHEDPEVKFMWYDGVENHA 272
DB 235 PCPAPPELLGGPSVFLPRLPKDPTLMISTRPEVTCVVVDVSHEDPEVKFMWYDGVENHA 294
QY 273 KTKPREEOYNSTYRVSVLTVLHQMNLNGKEYCKVSNKALPAPIEKTIISKAKGQPREPQ 332
DB 295 KTKPREEOYNSTYRVSVLTVLHQMNLNGKEYCKVSNKALPAPIEKTIISKAKGQPREPQ 354
QY 333 VYTLPPSRDELTKNOVSLTCLVKGFPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLY 392
DB 355 VYTLPPSRDEMTKNOVSLTCLVKGFPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLY 414
QY 393 SKLTVDKSRMOQGNVFCSCVMHEALHNHYTOKSLSPG 431
DB 415 SKLTVDKSRMOQGNVFCSCVMHEALHNHYTOKSLSPG 453

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RESULT 27
PCT-US93-07832-22
; Sequence 22, Application PC/TUS9307832
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; TITLE OF INVENTION: Immunoglobulin Variants
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 460 Point San Bruno Blvd
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatIn (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/07832
; FILING DATE: 19930820
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/715272
; FILING DATE: 14-JUN-1991
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/US92/05126
; FILING DATE: 15-JUN-1992
; PRIOR APPLICATION DATA:

```

APPLICATION NUMBER: 07/934373
FILING DATE: 21-AUG-1992
ATTORNEY/AGENT INFORMATION:
NAME:
REGISTRATION NUMBER:
REFERENCE/DOCKET NUMBER: 709P2PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE:
TELEFAX: 415/952-9981
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 454 amino acids
TYPE: amino acid
TOPOLOGY: linear
PCT-US93-07832-22

Query Match 47.2%; Score 1274.5; DB 5; Length 454;
Best Local Similarity 59.9%; Pred. No. 5.7e-91;
Matches 275; Conservative 24; Mismatches 87; Indels 73; Gaps 11;

30 LGKKGDTVELCTASQKSIQF--HMKNSQIKLNGQSFYTK-GPSKLNDRADSRSL 86
11 LVKPGASVKISCKTSGYTFEYTHMMKSHGSKLEWIGGFNPKGSSHNORFMDKATL 70
87 ---WDGNPFLIKNLKIEDSDTYICEVEDQKEEVQLLVGLTANSPTHLQ--GQSLTL 141
71 AVDKSTAYMELSLTSEDSGIYCC-----ARMRLNGYGFVRYFVWAGACTTV 120
142 TLSPSPSSPSVQCRSPRGKNIQCG-----KTLVSYS-----QLE 175
121 TVSSASTKGPSVFPPLASSTSGTALGCLVVDYFPEPYTWSMNGALTSQVHTPEAV 180
176 LQDSG-----TWCTVLOKQKVEFKLDYPCPAPPEKSCDKHTHC- 216
181 LQSGGLVSLSSVTVPPSSSLGTQYICNV--NHRPSNTKYD---KLYEPKSCDKHTHC 234
217 ---PELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNNYVVGVEYHNA 272
235 PCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNNYVVGVEYHNA 294
273 KTRPREQYNSTYRVSVLTFLVHQMVLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQ 332
295 KTRPREQYNSTYRVSVLTFLVHQMVLNGKEYCKVSNKALPAPIEKTISKAKGQPREPQ 354
333 VYTLPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLY 392
355 VYTLPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLY 414
393 SKLTVDSRWQOGNVFSCVMHEALHNHYTQKSLSLSPG 431
415 SKLTVDSRWQOGNVFSCVMHEALHNHYTQKSLSLSPG 453

RESULT 28
US-09-049-672A-4
Sequence 4, Application US/09049672A
Patent No. 6135941
GENERAL INFORMATION:
APPLICANT: Hillman, Jennifer L.
APPLICANT: Lal, Preeti
APPLICANT: Tang, Y. Tom
APPLICANT: Yue, Henry
APPLICANT: Au-Young, Janice
APPLICANT: Corley, Neil C.
APPLICANT: Guejler, Karl J.
APPLICANT: Baughn, Mariah R.
TITLE OF INVENTION: HUMAN IMMUNE SYSTEM ASSOCIATED PROTEINS
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
CITY: Palo Alto

STATE: CA
COUNTRY: USA
ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/049,672A
FILING DATE: HEREWITH
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Certone, Michael C
REGISTRATION NUMBER: 39,132
REFERENCE/DOCKET NUMBER: PF-0497 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
TELEFAX: 650-845-4166
TELEX:
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 473 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: PANTUT01
CLONE: 1513264
US-09-049-672A-4

Query Match 47.2%; Score 1274.5; DB 3; Length 473;
Best Local Similarity 57.2%; Pred. No. 6e-91;
Matches 278; Conservative 29; Mismatches 102; Indels 77; Gaps 11;

8 RHLLVLQALALP-----AATGKNKVLAKKGDVLELTAS--QKSIQFHMKNSQI 59
2 KHLMFLLVLAARWVLQVQLQSGPGLVKPSSETLSLTCVAGSGSITSGGYWSWIRP 61
60 KILGNO--GSFLKNGSKLNDRADSRSL--WDGNPFLIKNLKIEDSDTYICEVEDQ 114
62 PKGLENIGITYYSGSTLINPSLSKRVTSVDTSKQPSLKLSVTAADTAIVVYCARD- 120
115 KEKVQLLVGLTANSPTHLQGSGLTLTLESPPGSSPSVQCRSPRGKNIQCG----- 166
121 ---VGLRGNNGMDVWGQGLTVTSSASTKGPSVFPPLASSTSGTALGCLV 172
167 ---KTLVSYS-----QLELQDSG-----TWCTVLOKQ 190
173 KDYFPEPVTVSMNSGALTSQVHTFPVAVLQSSGLVSLSSVTVPPSSSLGTQYICNV--NH 230
191 KKVEFKIDIVPCAPAPPKSCDKHTHC-----PELLGGPSVFLFPPKPKDTLMISRTPEVT 245
231 KPSNTKYD---KRVBPKSCDKHTHCPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVT 266
246 CUVVDVSHEDPEVKFNNYVVGVEYHNAKTRPREQYNSTYRVSVLTFLVHQMVLNGKEYK 305
287 CUVVDVSHEDPEVKFNNYVVGVEYHNAKTRPREQYNSTYRVSVLTFLVHQMVLNGKEYK 346
306 CKVSNKALPAPIEKTISKAKGQPREPQVYTLTPSRDELTKNQVSLTCLVKGFYPSDIAVE 365
347 CKVSNKALPAPIEKTISKAKGQPREPQVYTLTPSRDELTKNQVSLTCLVKGFYPSDIAVE 406
366 WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDSRWQOGNVFSCVMHEALHNHYTQKS 425
407 WESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDSRWQOGNVFSCVMHEALHNHYTQKS 466
426 LSLSPG 431
467 LSLSPG 472

RESULT 29
 US-09-740-002-27
 ; Sequence 27, Application US/09740002
 ; Patent No. 6537809
 ; GENERAL INFORMATION:
 ; APPLICANT: BRAMS, PETER
 ; APPLICANT: MORROW, PHILLIP
 ; TITLE OF INVENTION: NEUTRALIZING HIGH AFFINITY HUMAN MONOCLONAL ANTIBODIES
 ; TITLE OF INVENTION: SPECIFIC TO RSV F-PROTEIN AND METHODS FOR THEIR
 ; FILE REFERENCE: 037003-0275759
 ; CURRENT APPLICATION NUMBER: US/09/740,002
 ; PRIOR FILING DATE: 2000-12-20
 ; PRIOR APPLICATION NUMBER: 09/335,697
 ; PRIOR FILING DATE: 1999-06-18
 ; PRIOR APPLICATION NUMBER: 08/488,376
 ; PRIOR FILING DATE: 1995-06-07
 ; NUMBER OF SEQ ID NOS: 27
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 27
 ; LENGTH: 475
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-740-002-27

Query Match 47.1%; Score 1273.5; DB 4; Length 475;
 Best Local Similarity 57.1%; Pred. No. 7.3e-91;
 Matches 276; Conservative 29; Mismatches 99; Indels 79; Gaps 11;

```

QY 10 LLLVLLALLPATQGNKVVLLGKKGDTVELCTAS-----QKSIQIHMKNKSNQIKL--- 62
DB 10 LVAVATRVLSQVQLQSSGRLVYKPTOTLTITCTFSFSLSTRKMSVNMVTRQPPKALEML 69
QY 63 ----GNQGSFELTKG-PSKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEE 117
DB 70 ARIDMDDFYSAISLKTRLSISKDTSKN-----QVVLKMTNVDPVDTATYFCARASLYDS 124
QY 118 VQLLVGLTRANSTHLLQGSLLTLESPPGSSPSVQCRSPKGNIQG----- 166
DB 125 DSFLF-----YHAYWQGTIVTVSSASTKGPVFLPAPSKSTSGTAAAGCLVXDY 177
QY 167 --KTLSSV-----QLELDGSG-----TWCTVLYQNKY 193
DB 178 FEPPTVVSNNKSGALITGCVHTFPAVLQSSGLISLVVTVPSSSLGITQYICNV--NHKES 235
QY 194 EFKIDIVPCPAPPKSCDKTHTC-----PELLGSPVFLPFPKPKDTLMISRTPEVTCV 248
DB 236 NTKVD---KKAEPKSCDKTHTCPCPAPPELLGSPVFLPFPKPKDTLMISRTPEVTCV 291
QY 249 VDVSHEDPEVKFMYVDGVEVHNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKV 308
DB 292 VDVSHEDPEVKFMYVDGVEVHNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKV 351
QY 309 SNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMES 368
DB 352 SNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMES 411
QY 369 NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQGNVFCGVMEALHNYHTQKSLSL 428
DB 412 NGQPENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQGNVFCGVMEALHNYHTQKSLSL 471
QY 429 SPG 431
DB 472 SPG 474

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RESULT 30
 US-09-499-846-6
 ; Sequence 6, Application US/09499846
 ; Patent No. 6656728
 ; GENERAL INFORMATION:

APPLICANT: Kavanaugh et al.
 ; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
 ; TITLE OF INVENTION: RECEPTOR-IMMUNOGLOBULIN FUSION
 ; FILE REFERENCE: 035784/195012 (5784-
 ; CURRENT APPLICATION NUMBER: US/09/499,846
 ; CURRENT FILING DATE: 2000-02-07
 ; NUMBER OF SEQ ID NOS: 12
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 6
 ; LENGTH: 497
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-499-846-6

Query Match 47.1%; Score 1273.5; DB 4; Length 497;
 Best Local Similarity 57.5%; Pred. No. 7.8e-91;
 Matches 276; Conservative 30; Mismatches 83; Indels 91; Gaps 12;

```

QY 15 QIALPAPATQGNKVVLLGKKGDTVELCTASQKSIQIHFH-KNSNQIK-----ILGNQGSFL 69
DB 45 KLHNVPA-----KTVKFKCPSSTPNTLMLKNGKEFKDPHRIGYKVRVA 92
QY 70 TKG-----PSKLNDRADSRSLMDQGNFPLIKNLKIEDSDTYICEVEDQKEEVQLIV 122
DB 93 TWSIIMDSVPS-----DKGNVTCIYENEGSINHVTQLDIVERSPHRPILQ 139
QY 123 FGLTANSDTHLLQGSLLTLESPP-----GSS-----PSVQCRSPKGNV 163
DB 140 ALPAPNKTVAGSNVEKCKYSDPQPHIQWLKHLVNGSKIGPNLPVQLKTAGVNT 199
QY 164 --QGKTLVSQLELDGSGTWTC-----TVLQNKKEFKIDIVPCP--- 203
DB 200 TDKEMEVLHNRVSEDEGAYETCLAGNSIGLSHSAMLTVE---ALBRPAMVMSPLYL 256
QY 204 -----APEPKSCDKTHTC-----PELLGSPVFLPFPKPKDTLMISRTPEVTCVVDV 251
DB 257 EGSGSPGLQEPKSCDKTHTCPCPAPPELLGSPVFLPFPKPKDTLMISRTPEVTCVVDV 316
QY 252 SHEDEPEVKFMYVDGVEVHNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNK 311
DB 317 SHEDEPEVKFMYVDGVEVHNAKTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNK 376
QY 312 ALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNQ 371
DB 377 ALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNQ 436
QY 372 PENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQGNVFCGVMEALHNYHTQKSLSLSPG 431
DB 437 PENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQGNVFCGVMEALHNYHTQKSLSLSPG 496

```

RESULT 31
 US-09-499-846-4
 ; Sequence 4, Application US/09499846
 ; Patent No. 6656728
 ; GENERAL INFORMATION:
 ; APPLICANT: Kavanaugh et al.
 ; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
 ; TITLE OF INVENTION: RECEPTOR-IMMUNOGLOBULIN FUSION
 ; FILE REFERENCE: 035784/195012 (5784-
 ; CURRENT APPLICATION NUMBER: US/09/499,846
 ; CURRENT FILING DATE: 2000-02-07
 ; NUMBER OF SEQ ID NOS: 12
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 4
 ; LENGTH: 525
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-09-499-846-4

Query Match 47.1%; Score 1273.5; DB 4; Length 525;
 Best Local Similarity 57.5%; Pred. No. 8.4e-91;
 Matches 276; Conservative 30; Mismatches 83; Indels 91; Gaps 12;


```

Oy 15 QIALPAAOTGANKVYLGGKSDTELCTSOAKKSIOGFHH-KNSNOIK-----ILNQGSL 69
Db 73 KLAHVPA-----KTVKFCGSSGTPNPLRLKAKGKFFKDRHIGGKRYIA 120
Oy 70 TKG-----PSKLNDRADSRSLMDQGNFLIKNLKLBDSDTYICEVEROKEEYOLLV 122
Db 121 TWSIMDSVPS-----DKGNVTCIVENEGSINHITYQLDVERSPHRRPILQ 167
Oy 123 FGLTANSDTHLLQOQSITLTLBSP-----GSS-----PSVCCSRSPRGKNI 165
Db 168 AGLEPAANTVALGSNVEFMCKVYSDPQRHIOMLKHLIVNGSKIGPDLRYVQOILDTAGANT 227
Oy 164 --OGKTLVSOLELODSTWTG-----TVLONAKVEFFKIDYPCP--- 203
Db 228 TDKMEVULHRIANVSPEDAGEYTCILAQNSIGLSHSMALTVLE--ALEERRAVWTSPLYL 284
Oy 204 -----APPKSCDKTHTC-----DELLGSPSVLFPFKPKDTLMISRTPEVTCVVVD 251
Db 285 EGSQSPLOEPKSCDCKTHTCPRCAPAEILLGSPSVLFPFKPKDTLMISRTPEVTCVVVD 344
Oy 252 SHEDPEVKFMVYDGYEVHNAKTKPREEOYNSYTVRVASVLTVLHODMLNGKEVYCKVSNK 311
Db 345 SHEPPEVKFMVYDGYEVHNAKTKPREEOYNSYTVRVASVLTVLHODMLNGKEVYCKVSNK 404
Oy 312 ALPAPIKTSIKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNQ 371
Db 405 ALPAPIKTSIKAKGQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNQ 464
Oy 372 PENNYKTTTPVLSDSGFFLYSKLTVDKSRMQQGVFGSSVNHENLHNHYQOKSLSPG 431
Db 465 PENNYKTTTPVLSDSGFFLYSKLTVDKSRMQQGVFGSSVNHENLHNHYQOKSLSPG 524

```

```

RESULT 32
US-09-499-846-2
; Sequence 2, Application US/09499846
; Patent No. 6656728
; GENERAL INFORMATION:
; APPLICANT: Kavanaugh et al.
; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
; FILE REFERENCE: 035784/195012 (5784
; CURRENT APPLICATION NUMBER: US/09/499,846
; CURRENT FILING DATE: 2000-02-07
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 622
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-499-846-2

Query Match 47.1%; Score 1273.5; DB 4; Length 622;
Best Local Similarity 57.0%; Pred. No. 1,16-90;
Matches 276; Conservative 31; Mismatches 86; Indels 91; Gaps 12.

QY 15 QALPPAATGKGVKAGKGDVLTCTASOKRSIQIFHW-KNSNQIKILGNSGSELTGKP 73
Db 162 KLHAYPAA-----KTVKFKCPSSGTPNPTLRLWLNKGKFEKDRHIGGYK--- 206
QY 74 SKLNRADRSRSLW-----DQGNPFLIKLKLIEDSDTYICEVEDQKEVQLLVF 123
Db 207 -----RATWTIIMDSVVPSSDKGNYTCIVENEYGSINHYYQLDIVERSPPHPIIQA 257
QY 124 GLTANSDTHLLQGQSLTLTLESPP-----GSS-----PSVQCRSPRGKNI- 163
Db 258 GLPANKYVALGNSVNEFMCKVYSDPPHIQLMKHLEVNSKSIKGRDNLRYVQILKTAGVNTT 317
QY 164 -QGKTLVSQLELQDSEGTWC-----TVLONQKK-----VEFKI 197
Db 318 DKMEVHLIRNVSEFDAGEYTCLAGNSIGLSHNSAMLTVLLELRRAVMTSPVLTESRG 377

```

Qy	198	DIYP-----CPA--PEPKSCDKHTC-----PELGGPSVFLPPPKKDTLMSRPETVCV	247
	:		
Db	378	GLVPRGSGSGGLQEPKSCDKHTCCPCAPPELLGGPSVFLPPPKDTLMISRPETVCV	437
Qy	248	VVDVSHEDPEVKFKNMIVDGVENVHNAKTKRPEQYNSTYRVVSVLTVTHQDMLNKEVKCK	307
Db	438	VVDVSHEDPEVKFKNMIVDGVENVHNAKTKRPEQYNSTYRVVSVLTVTHQDMLNKEVKCK	497
Qy	308	VSNNKALPAPEKKTISKAKGQPREPOVYTLPPSRDELITGNQVSLTCLVKGFPSPDIAVEME	367
Db	498	VSNNKALPAPEKKTISKAKGQPREPOVYTLPPSRDELITGNQVSLTCLVKGFPSPDIAVEME	557
Qy	368	SNQGPENNYKTPRPVLVDGSGFFLYSKLTVDSKRWQGNVFGCSVMEDALHNHYTQKSLS	427
Db	558	SNQGPENNYKTPRPVLVDGSGFFLYSKLTVDSKRWQGNVFGCSVMEDALHNHYTQKSLS	617
Qy	428	LSPG 431	
Db	618	LSPG 621	

```

RESULT 33
US-09-301-593-18
; Sequence 18, Application US/09301593A
; Patent No. 6435677
; GENERAL INFORMATION:
; APPLICANT: Park, John B.
; APPLICANT: Garlin-Cheesa, Pilar
; APPLICANT: Bamberger, Uwe
; APPLICANT: Leger, Olivier
; APPLICANT: Saldanha, Jose W.
; APPLICANT: Rettig, Wolfgang J.
; TITLE OF INVENTION: FAP-specific Antibody with Improved Productibility
; FILE REFERENCE: 0652.1890001
; CURRENT APPLICATION NUMBER: US/09/301,593A
; CURRENT FILING DATE: 1999-04-29
; EARLIER APPLICATION NUMBER: EP 98107925.4
; EARLIER FILING DATE: 1998-04-30
; EARLIER APPLICATION NUMBER: US 60/086,049
; EARLIER FILING DATE: 1998-05-18
; NUMBER OF SEQ ID NOS: 108
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 18
; LENGTH: 453
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-301-593-18

```

Query Match	47.1%	Score 1271.5	DB 4	Length 453
Match Local Similarity	59.0%	Pred. No. 9/6-91		
Matches 271	Conservative 31	Mismatches 84	Indels 73	Gaps 12
Qy	30	LGKKDPTVELTCTASOKKSIOF--HMKNNSNDIKILANGQSF-LTKGSKLNDRADSRSL	86	
Db	10	LVKFGASVMSCKTSRTFTYRTTHWROSIGSKLEMTIGINPNNGILPNTNOKKRGARTL	69	
Qy	87	W---DQGNFPLINKLKIEDSDTYICEVEDOKEVQLVFGLTANSDTHLQ--GQSITL	141	
Db	70	TVGKSSSTAYWELMSLTSBDSAVFC-----ARRIANGY---DEGHMADYGGGHSV	119	
Qy	142	TLESPPGSSPSVQCRSPGKNIOG-----KTLISV-----OLE	175	
Db	120	TVSSASTKGPSPVPLAPSSKTSGGTALGCLVDPYEPPEPPTVSWNSGALTSGVHTPEAV	179	
Qy	176	LQDSG-----TWCTVLONOKKVEFKLDIVCAPAPSPKSCDHTHC	216	
Db	180	LQSSGLVSLSSVTVPPSSLGOTQTYICNV--NHNPSNTKYD---KVAEPKSCDHTHCP	233	
Qy	217	-----PELIGGSVFLPPKPKDQTLMI SRTEPVTGVVVDVSHEDPEVFNMYVDGVEYHNA	272	
Db	234	PCPAPPELLGGSVFLPPPKPKDQTLMI SRTEPVTGVVVDVSHEDPEVFNMYVDGVEYHNA	293	
Qy	273	KTKREBOYNSTYRVSVLTVLHODWLNGKEKYCKVSNNKLPALIEKTSIKAKQPREPQ	332	

Db 294 KKKRREQNSTYRVSVTLVHQMNLNKEKCKKSNKALPAPIEKTISKAGPREQ 353
Qy 333 YTLPPSRDELTKNOVSLTCLVKGFPSPDIAYEWESNGCPENNYKTTTPVLDSGFFLY 392
Db 354 YTLPPSRREMTKNQVSLTCLVKGFPSPDIAYEWESNGCPENNYKTTTPVLDSGFFLY 413
Qy 393 SKLTVDSRMQOGNVFSCSVMEHALNHYTKSLSPG 431
Db 414 SKLTVDSRMQOGNVFSCSVMEHALNHYTKSLSPG 452

RESULT 34
US-08-487-550-12
; Sequence 12, Application US/08487550
; Patent No. 6113898
; GENERAL INFORMATION:
; APPLICANT: Anderson, Darrell R.
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
; STREET: 699 Prince Street
; CITY: Alexandria
; STATE: VA
; COUNTRY: USA
; ZIP: 22314
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/487,550
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-131
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 476 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-487-550-12

Query Match 47.0%; Score 1271; DB 3; Length 476;
Best Local Similarity 59.8%; Pred. No. 1.1e-90;
Matches 274; Conservative 29; Mismatches 87; Indels 68; Gaps 11;

Qy 30 LKKKGDVLTCTASQ---KKSIOFMKNSNOIKILGNOSFL-TKPSKLNDRADSRSS 85
Db 30 LVKPSFTLSTCAVSGSGISGCGWMIROPKGLWIGSFYSSSGNTYYPNLSKSQVT 89
Qy 86 L---WQGNFPLIKLKIEDSTTYICEVBDQKEBQQLVFGILTANSOHTLLQGSLLIT 142
Db 90 ISTDSKNOFSLKLNMTADTAIVYVC-VRDLFSVVGWY---NNMFWDWGPGLVLT 143
Qy 143 LSSPSSPVQCRSGKNIQGG-----KTLISV-----QLBL 176
Db 144 VSSASITKGSVPPLAESSKSTSGTALAGCLVQDYPEPEVYISMNSGALTSGVHTPNAV 203
Qy 177 QDSG-----TWICTVLONOKVEFKIDIVCPAPPEKSCDKTHTC-- 216
Db 204 QSSGLVSLSSVTVTPSSISGTOTYICNV--NHKPSNTKVD---KKAEPKSCDKTHTCP 257

Qy 217 ---PELLGSPVFLFPPKCDTLMISRTPEYTCVVVDVSHEDPEYKFMNYYDGEVHNAX 273
Db 258 CPAPELGSPVFLFPPKCDTLMISRTPEYTCVVVDVSHEDPEYKFMNYYDGEVHNAX 317
Qy 274 TKPREQNSTYRVSVTLVHQMNLNKEKCKKSNKALPAPIEKTISKAGPREQV 333
Db 318 TKPREQNSTYRVSVTLVHQMNLNKEKCKKSNKALPAPIEKTISKAGPREQV 377
Qy 334 YTLPPSRDELTKNOVSLTCLVKGFPSPDIAYEWESNGCPENNYKTTTPVLDSGFFLYS 393
Db 378 YTLPPSRDELTKNOVSLTCLVKGFPSPDIAYEWESNGCPENNYKTTTPVLDSGFFLYS 437
Qy 394 KLTVDKSRMQOGNVFSCSVMEHALNHYTKSLSPG 431
Db 438 KLTVDKSRMQOGNVFSCSVMEHALNHYTKSLSPG 475

RESULT 35
US-09-526-098-12
; Sequence 12, Application US/09526098
; Patent No. 6492134
; GENERAL INFORMATION:
; APPLICANT: Anderson, Darrell R.
; TITLE OF INVENTION: "MONKEY MONOCLONAL ANTIBODIES SPECIFIC
; TITLE OF INVENTION: TO HUMAN B7.1 AND/OR B7.2 PRIMATIZED FORMS THEREOF
; TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING, AND USE THEREOF AS
; TITLE OF INVENTION: IMMUNOSUPPRESSANTS"
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
; STREET: 699 Prince Street
; CITY: Alexandria
; STATE: VA
; COUNTRY: USA
; ZIP: 22314
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/526,098
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/383,916
; FILING DATE:
; APPLICATION NUMBER: US 08/487,550
; FILING DATE: 07-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Teskin, Robin L.
; REGISTRATION NUMBER: 35,030
; REFERENCE/DOCKET NUMBER: 012712-131
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-836-6620
; TELEFAX: 703-836-2021
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 476 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-09-526-098-12

Query Match 47.0%; Score 1271; DB 4; Length 476;
Best Local Similarity 59.8%; Pred. No. 1.1e-90;
Matches 274; Conservative 29; Mismatches 87; Indels 68; Gaps 11;

Qy 30 LKKKGDVLTCTASQ---KKSIOFMKNSNOIKILGNOSFL-TKPSKLNDRADSRSS 85
Db 30 LVKPSFTLSTCAVSGSGISGCGWMIROPKGLWIGSFYSSSGNTYYPNLSKSQVT 89

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Qy 86 L---WDGNFPLIKLKIEDSDTYICEVEDQKEVOLVFGLTANSDTHLLOQSILTLT 142
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 1STDSKNOFSLKLNMTAADTAYYC-VDRLEFSVGMVY-----NNMFDVWGPGVLT 143
Qy 143 LESPFGSPVQCRSPRGKNIQGG-----KTLSSVS-----OLEL 176
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 144 VSSASTKGPSVFLPAPLPSKSTSGGTALGCLVKDYFPEPTVSNVNSGALTSGVHTFPAVL 203
Qy 177 QDSG-----TWCTVLONOKKVEFKIDIVPCPAPRPSCDKTHTC-- 216
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 204 QSSGLVLSVSVVTPSSSLGTQYICNV--NHKPSNTKVD---KKAEPKSCDKTHTCPP 257
Qy 217 ---PELLGSPSVLFPKPKDPTLMISRTPEVTCVVDVSHEDPEVKENWYVDGEVNAK 273
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 258 CPAPELLGSPSVLFPKPKDPTLMISRTPEVTCVVDVSHEDPEVKENWYVDGEVNAK 317
Qy 274 TKREEDYNSTYRVSVLTVLHODWLNKGEYKCVSKALPAPIEKTISAKGQPREPOV 333
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 318 TKREEDYNSTYRVSVLTVLHODWLNKGEYKCVSKALPAPIEKTISAKGQPREPOV 377
Qy 334 YTLPPSDELTKQOVSLTCLVKGFPSDIAVEMESNQCPENNYKTPPVLDSDGSFELY 393
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 378 YTLPPSDELTKQOVSLTCLVKGFPSDIAVEMESNQCPENNYKTPPVLDSDGSFELY 437
Qy 394 KLTVDKSRMOQGNVFCSCVNHKALHNHYTQKSLSLSPG 431
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 438 KLTVDKSRMOQGNVFCSCVNHKALHNHYTQKSLSLSPG 475

```

```

RESULT 36
US-09-485-737B-67
; Sequence 67, Application US/09485737B
; Patent No. 6350860
; GENERAL INFORMATION:
; APPLICANT: Buysse, Marie-Ange
; TITLE OF INVENTION: INTERFERON-gamma-BINDING MOLECULES FOR TREATING SEPTIC SHOCK,
; FILE REFERENCE: INNS:015
; CURRENT APPLICATION NUMBER: US/09/485, 737B
; PRIOR FILING DATE: 2000-02-14
; PRIOR APPLICATION NUMBER: PCT/EP 98/05165
; PRIOR FILING DATE: 1998-08-14
; PRIOR APPLICATION NUMBER: EPO 98870139.7
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: EPO 97870122.5
; PRIOR FILING DATE: 1997-08-18
; NUMBER OF SEQ ID NOS: 104
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 67
; LENGTH: 468
; TYPE: PRF
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: SYNTHETIC
US-09-485-737B-67

```

```

Query Match 46.8%; Score 1265.5; DB 4; Length 468;
Best Local Similarity 57.2%; Pred. No. 3e-90;
Matches 277; Conservative 31; Mismatches 79; Indels 97; Gaps 13;

Qy 11 LVLQALALPAATQGNKVVILGKKGDVLELTCTASQKSIQFHKNSNOIKILNQGSEFLT 70
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 17 VILSQVQLVQSGSE-----LKKPGASVKISCKAS---GYFTFDYGMNWVKQARQGQ--L 65
Qy 71 KGPSKLNDRADSRSLMD-QGNFP-----LIIKLIKIEDSDTYICEVEDQKEEV 118
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 66 KMGWIMNTYTGSESTYVDKGRFVFLSDTSVAAYLIQISSLKAEDTATYFC----- 116
Qy 119 QLLVFGLTANSDTHLLO--GQSLTLTLESPGSPVQCRSPRGKNIQGG----- 166
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 117 -----ARRGFYAMDYWGCGTTTVVSSASTKGPSVFLPAPLPSKSTSGGTALGCLVKD 168

```

```

Qy 167 ---KTLSSVS-----OLELQDSG-----TWCTVLONOKK 192
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 169 YFPEPTVSNVNSGALTSGVHTFPAVLQSSGLVLSVSVVTPSSSLGTQYICNV--NHK 226
Qy 193 VERKIDIVPCPAPRPSCDKTHTC-----PELLGSPSVLFPKPKDPTLMISRTPEVTCV 247
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 227 SNTKVD---KRAVEPKSCDKTHTCPPCPAPPELLGSPSVLFPKPKDPTLMISRTPEVTCV 282
Qy 248 VVDVSHEDPEVKENWYVDGEVNAKTKPREEDYNSTYRVSVLTVLHODWLNKGEYKCK 307
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 283 VVDVSHEDPEVKENWYVDGEVNAKTKPREEDYNSTYRVSVLTVLHODWLNKGEYKCK 342
Qy 308 VSNKALPAPIEKTISAKGQPREPOVYTLPPSDELTKQOVSLTCLVKGFPSDIAVEME 367
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 343 VSNKALPAPIEKTISAKGQPREPOVYTLPPSDELTKQOVSLTCLVKGFPSDIAVEME 402
Qy 368 SNGQPENNYKTPPVLDSDGSFELYSKLTVDKSRMOQGNVFCSCVNHKALHNHYTQKSLS 427
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 403 SNGQPENNYKTPPVLDSDGSFELYSKLTVDKSRMOQGNVFCSCVNHKALHNHYTQKSLS 462
Qy 428 LSPG 431
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 463 LSPG 466

```

```

RESULT 37
US-09-485-737B-90
; Sequence 90, Application US/09485737B
; Patent No. 6350860
; GENERAL INFORMATION:
; APPLICANT: Buysse, Marie-Ange
; TITLE OF INVENTION: INTERFERON-gamma-BINDING MOLECULES FOR TREATING SEPTIC SHOCK,
; FILE REFERENCE: INNS:015
; CURRENT APPLICATION NUMBER: US/09/485, 737B
; PRIOR FILING DATE: 2000-02-14
; PRIOR APPLICATION NUMBER: PCT/EP 98/05165
; PRIOR FILING DATE: 1998-08-14
; PRIOR APPLICATION NUMBER: EPO 98870139.7
; PRIOR FILING DATE: 1998-06-18
; PRIOR APPLICATION NUMBER: EPO 97870122.5
; PRIOR FILING DATE: 1997-08-18
; NUMBER OF SEQ ID NOS: 104
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 90
; LENGTH: 711
; TYPE: PRF
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: SYNTHETIC
US-09-485-737B-90

```

```

Query Match 46.8%; Score 1265.5; DB 4; Length 711;
Best Local Similarity 57.2%; Pred. No. 5.4e-90;
Matches 277; Conservative 31; Mismatches 79; Indels 97; Gaps 13;

Qy 11 LVLQALALPAATQGNKVVILGKKGDVLELTCTASQKSIQFHKNSNOIKILNQGSEFLT 70
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 17 VILSQVQLVQSGSE-----LKKPGASVKISCKAS---GYFTFDYGMNWVKQARQGQ--L 65
Qy 71 KGPSKLNDRADSRSLMD-QGNFP-----LIIKLIKIEDSDTYICEVEDQKEEV 118
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 66 KMGWIMNTYTGSESTYVDKGRFVFLSDTSVAAYLIQISSLKAEDTATYFC----- 116
Qy 119 QLLVFGLTANSDTHLLO--GQSLTLTLESPGSPVQCRSPRGKNIQGG----- 166
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 117 -----ARRGFYAMDYWGCGTTTVVSSASTKGPSVFLPAPLPSKSTSGGTALGCLVKD 168
Qy 167 ---KTLSSVS-----OLELQDSG-----TWCTVLONOKK 192
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 169 YFPEPTVSNVNSGALTSGVHTFPAVLQSSGLVLSVSVVTPSSSLGTQYICNV--NHK 226

```


Qy	173	-OLELQDSG-----	-TTCVLVNOKKVEKIDIVCPAPEKSCDKT	21.3
Db	175	FPAVLQSGSLYSLSVVTVPSSSLGHTQYICNV--	NHKPSMTKVD----	KVEKSCDKT 22.8
Qy	214	HTC-----	PFLGGPSVFLLPFPKQDTLMTISTPEVTCVYVDVSHEDPEVKFNMYVDGVE	26.6
Db	229	HTCPCPAPAPLLGGPSVFLFPFPKPDTL-ISKTPETCTCVYDVSHEDPEVKFNMYVDGVE		28.7
Qy	269	VHNAKTPREEOYNSTYRVSVYLTVAHQMLNGKEKCKVSKNALPAIIEKTIISKAGOP		32.8
Db	288	VHNAKTPREEOYNSTYRVSVYLTVAHQMLNGKEKCKVSKNALPAIIEKTIISKAGOP		34.7
Qy	329	REPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDI	AVESNQPENNYKTPPVYLDGSG	36.8
Db	348	REPOVYTLPPSRDELTKNOVSLTCLVKGFPSPDI	AVESNQPENNYKTPPVYLDGSG	40.7
Qy	389	FPLYSKLTVDKSRMOQGNVPSGCVHMEALAHNHYTQKSLISLSPG		43.1
Db	408	FPLYSKLTVDKSRMOQGNVPSGCVHMEALAHNHYTQKSLISLSPG		45.0

```

RESULT 40
US-09-466-635-3
Sequence 3, Application US/09466635
Patent No. 6413514
GENERAL INFORMATION:
APPLICANT: Aruffo, Alejandro A.
APPLICANT: Sladak, Anthony W.
APPLICANT: Berry, Karen K.
APPLICANT: Harris, Linda
APPLICANT: Thorne, Barbara A.
APPLICANT: Bajorath, Jürgen
TITLE OF INVENTION: ANTIBODIES AGAINST HUMAN CD40
FILE REFERENCE: DB2 SEQUENCE
CURRENT APPLICATION NUMBER: US/09/466,635
CURRENT FILING DATE: 1999-12-17
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 3
LENGTH: 451
TYPE: PRT
ORGANISM: Human and Mouse
US-09-466-635-3

```

Query Match	46.8%	Score 1264	DB 4	Length 451
Best Local Similarity	59.6%	Pred No. 3.7e-90		
Matches 276	Conservative 23	Mismatches 80	Indels 84	Gaps 13

Qy	30	LGKGGDTVELTCTASQKKSIOFMKXNSNOIKITLGNQSGPLTGTGPKSLNDRADRSRLMD	86
Db	11	LKKRGVEVTRISCAUS---GYAFTTMMOMVQGMPEKGS---LKMIGMITHSGVEKYVEDF	64
Qy	89	QGNFP-----LIINKLKIEDSDTYICEVEDQKEVQLVFGLTANSDTHLLQSQ	137
Db	65	KGRFAPSLETSANTAYLAQISNLKNEBDTATYFC-VSGNGNYDLWAYFA-----YMGQ	114
Qy	138	SLTLTLESPPGSSPSVOCSPRGKINIOG-----KTLSSV-	172
Db	115	GLTVLTVSAASTKQPSVFLPLAPSKSISSGCTALGLCLVDDYFPEPTVYSMNSGALITSGVHT	174
Qy	173	-QLELDQSG-----TWTCTVLONQKKVEFKIDLYPCAPAPBKSCDKT	213
Db	175	FPAYLQSSGGLYSLSVYTVSSSLGTQTYICNV--NHRKPSMTKYD---KKEVEKSCDKT	228
Qy	214	HTC-----PELLGSPVFLFPKPKDMLISRTPEVTCVWVDVSHEDPEVKFNMYVDGVE	268
Db	229	HTCPCPAPELGLGSPVFLFPKPKDYL-ISTPEVTCVWVDVSHEDPEVKFNMYVDGVE	287
Qy	269	VHNAKTKPRREQYNSTRYRVSVYLVTLHQMVLNGKRYCKCKNSKALPAIETKITSKAGOP	328
Db	288	VHNAKTKPRREQYNSTRYRVSVYLVTLHQMVLNGKRYCKCKNSKALPAIETKITSKAGOP	347

QY	QY	QY	QY
329	329	329	329
348	348	348	348
389	389	389	389
408	408	408	408

RESULT 41
US-09-027-449-71
: Sequence 71, Application US/09027449
: Patent No. 6025158
: GENERAL INFORMATION:
: APPLICANT: Gonzalez, Tania R.
: APPLICANT: Leong, Steven R.
: APPLICANT: Presta, Leonard G.
: TITLE OF INVENTION: Antibody Fragment-Polymer Conjugates and
: TITLE OF INVENTION: Humanized Anti-IL-8 Monoclonal Antibodies
: NUMBER OF SEQUENCES: 72
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Genentech, Inc.
: STREET: 1 DNA Way
: CITY: South San Francisco
: STATE: California
: COUNTRY: USA

```

1      COMPUTER READABLE FORM:
2      MEDIUM TYPE: 3.5 inch, 1.44-Mb f1d
3      COMPUTER: IBM PC compatible
4      OPERATING SYSTEM: PC-DOS/MS-DOS
5      SOFTWARE: winpatln (Genentech)
6      CURRENT APPLICATION DATA:
7      APPLICATION NUMBER: US/09/027,449
8      FILING DATE: 20-Feb-1998
9      CLASSIFICATION: 435
10     PRIOR APPLICATION DATA:
11     APPLICATION NUMBER: 60/074,330
12     FILING DATE: 22-Jan-1998
13     PRIOR APPLICATION DATA:
14     APPLICATION NUMBER: 60/038,664
15     FILING DATE: 21-Feb-1997
16     ATTORNEY/AGENT INFORMATION:
17     NAME: Love, Richard B.
18     REGISTRATION NUMBER: 34,659
19     REFERENCE/DOCKET NUMBER: P1085R3-2
20     TELECOMMUNICATION INFORMATION:
21     TELEPHONE: 650/225-5530
22     TELEFAX: 650/952-9881
23     INFORMATION FOR SEQ ID NO: 71:
24     SEQUENCE CHARACTERISTICS:
25     LENGTH: 452 amino acids
26     TYPE: Amino Acid
27     TOPOLOGY: Linear
28
29 US-09-027-449-71

```

Query Match	46.8%	Score 1263.5;	DB 3;	length 452;
Best Local Similarity	59.6%	Pred. No. 4.1e-90;		
Matches 273;	Conservative 26;	Mismatches 86;	Indels 73;	Gaps 11

QY 30 LKGGGVTELTCTGAS--QKKSIOFMKNSNQIKILGNQGF-LTKGSKINDRADRSRL 86
 Db 11 LVDPGSSLSCAGSYGFSFSSHYMMVWQAPGKGLBNVGYIDPSNGETTYNOKKGFLL 70
 QY 87 W--DQGNPLIIRKNIKIEDSPTYICEVEDQKEVQLVFGLTANSDTHL-LOGSLTLT 142
 Db 71 SRNSKNTAYLQMSLSRAEDTAVYYCAAGDYR-----YNGMFDWNGGGLVT 119
 QY 143 LBSPPGSSPSVQCRSPRGNIOG-----KTLSSV-----OLEL 176
 Db 120 VSSASTKGRSVPLPLAPSSKSTSGGTAALGCLVKDYFPPEPLTVSNMGALVSGVHTPPAVL 179
 QY 177 QDSG-----TWCTVLQNKQVKEKIDIVCPADPEKSCDKTHTC- 216

Db 180 QSSGLYSLSSVTVTPSSSLGTOTYICNV--NHKPSNTKVD----KVEPKSCDKHTHTCP 233
QY 217 ---PELLGSPSVFLFPFKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNK 273
Db 234 CPAPELLGSPSVFLFPFKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNK 293
QY 274 TKPREQVNSTYRKYVSLTVLHODMLNGEKYCKVSNKALPAPIETKISKAKGQPREPOV 333
Db 294 TKPREQVNSTYRKYVSLTVLHODMLNGEKYCKVSNKALPAPIETKISKAKGQPREPOV 353
QY 334 YTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYS 393
Db 354 YTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYS 413
QY 394 KLTVDKSRMQQGNVFSQVMHEALHNHYTQKSLSLSPG 431
Db 414 KLTVDKSRMQQGNVFSQVMHEALHNHYTQKSLSLSPG 451

RESULT 42

US-09-026-985-71
; Sequence 71, Application US/09026985
; Patent No. 6133426
; GENERAL INFORMATION:
; APPLICANT: Gonzalez, Tania R.
; APPLICANT: Presta, Leonard G.
; TITLE OF INVENTION: Antibody Fragment-Polymer Conjugates and
; TITLE OF INVENTION: Humanized Anti-IL-8 Monoclonal Antibodies
; NUMBER OF SEQUENCES: 72
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Winpatin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/026,985
; FILING DATE: 20-Feb-1998
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: P1085R3-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-5530
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 71:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 452 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear
US-09-026-985-71

Query Match 46.8%; Score 1263.5; DB 3; Length 452;
Best Local Similarity 59.6%; Pred. No. 4.1e-90;
Matches 273; Conservative 26; Mismatches 86; Indels 73; Gaps 11;
QY 30 LGKKGDVVELTCTAS--OKSKIQPHKNSNOIKILNQGSF--LTGKPSKLNDRADSRSL 86
Db 11 LVPGGSLSLSCAASGYSSSHMHVVRQAPGKLEWGVYIDPSNGETTYNKKFKRFTL 70
QY 87 W---DQGNPLIITKNIKIEDSDTYICEVEDQKEEVLVGLTANSDTL--LOGSLTIL 142
Db 71 SRDNSKNTAYLVQMNISRAEDTAVYVCARGDYR-----YNDMDFPDVWGQCTLV 119

QY 143 LESPSPSSVQCRSPRKNIQG-----KTLSSV-----QLEL 176
Db 120 VSSASTKPSVFPPLAPSSKSTSGTALGCLVKDYFPEPEVYSNNSGALTSQHTFPVAVL 179
QY 177 QDSG-----TWTCVLQNOQKVEFKIDIVCPAPBPKSCDKHTHTC-- 216
Db 180 QSSGLYSLSSVTVTPSSSLGTOTYICNV--NHKPSNTKVD----KVEPKSCDKHTHTCP 233
QY 217 ---PELLGSPSVFLFPFKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNK 273
Db 234 CPAPELLGSPSVFLFPFKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNMYVDGVEVHNK 293
QY 274 TKPREQVNSTYRKYVSLTVLHODMLNGEKYCKVSNKALPAPIETKISKAKGQPREPOV 333
Db 294 TKPREQVNSTYRKYVSLTVLHODMLNGEKYCKVSNKALPAPIETKISKAKGQPREPOV 353
QY 334 YTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYS 393
Db 354 YTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTPPVLDSDGSFFLYS 413
QY 394 KLTVDKSRMQQGNVFSQVMHEALHNHYTQKSLSLSPG 431
Db 414 KLTVDKSRMQQGNVFSQVMHEALHNHYTQKSLSLSPG 451

RESULT 43

US-09-121-952A-71
; Sequence 71, Application US/09121952A
; Patent No. 6458355
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc., Hsael, Vanessa
; APPLICANT: Kouments, Iphigenia
; APPLICANT: Leong, Steven R.
; APPLICANT: Presta, Leonard G.
; APPLICANT: Shatrokh, Zahra
; APPLICANT: Zapata, Gerardo A.
; TITLE OF INVENTION: METHODS OF TREATING INFLAMMATORY DISEASES
; TITLE OF INVENTION: WITH ANTI-IL-8 ANTIBODY FRAGMENT-POLYMER CONJUGATES
; NUMBER OF SEQUENCES: 72
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Winpatin (Genentech)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/121,952A
; FILING DATE: 24-Jul-1998
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/074330
; FILING DATE: 22-JAN-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/075467
; FILING DATE: 20-FEB-1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Love, Richard B.
; REGISTRATION NUMBER: 34,659
; REFERENCE/DOCKET NUMBER: P1085R4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650/225-5530
; TELEFAX: 650/952-9881
; INFORMATION FOR SEQ ID NO: 71:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 452 amino acids
; TYPE: Amino Acid
; TOPOLOGY: Linear

US-09-121-952A-71

Query Match 46.8%; Score 1263.5; DB 4; Length 452;

Best Local Similarity 59.6%; Pred. No. 4,1e-90; Indels 73; Gaps 11;

Matches 273; Conservative 26; Mismatches 86; Indels 73; Gaps 11;

QY 30 LGKKGDTVELTCTAS--QKKSIOFHWNKSNQIKILGNQGSF-LTKGPSKLNDRADSRSL 86

DB 11 LVPGGSLRLSCAASGVFSFSHYMHWROAPGKLEWVGVIDPSNGETTYNQFKGRFTL 70

QY 87 W---DQGNFPLIIKNLKIEDSDTYICEVEDQKEVOLVPGLTANSPTHL-LOGOSILTLT 142

DB 71 SRDNRKNTAYLQWNSLRADDTAVYYCARGDYR-----YNGDWFFDVWGQGLVT 119

QY 143 LESPSSPSVQCRSPRGKNIQGS-----KTLVS-----QLEL 126

DB 120 VSSASTKGPSVFPLAAPSSTSGGTALGCLVKDYRPEPTVSNLSGALTSGVHTTTPAVL 179

QY 177 QDSG-----TWCTVLQONKVEFKIDIVPCPAPEPKSCDKTHTC-- 216

DB 180 QSSGLVSLSSVTVTPSSSLGTQTYICNV--NHKPSNTKVD---KKEPKSCDKTHTCRP 233

QY 217 ---PELLGSPSVLPFPKPKDITLMISRTPEVTCVVDVSHEDPEVKFNMTVDGEVHNK 273

DB 234 CPAPELLGSPSVLPFPKPKDITLMISRTPEVTCVVDVSHEDPEVKFNMTVDGEVHNK 293

QY 274 TKREBOYNSTYRVSVLTVLHODMLNGEKYCKCKVSNKALPAPIEKTISAKGQPREPOV 333

DB 294 TKREBOYNSTYRVSVLTVLHODMLNGEKYCKCKVSNKALPAPIEKTISAKGQPREPOV 353

QY 334 YTLPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYS 333

DB 354 YTLPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYS 413

QY 394 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 431

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

QY 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

QY 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

QY 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

QY 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

QY 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

QY 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

QY 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

QY 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

QY 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

QY 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

QY 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

FILING DATE: 22-JAN-1998

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 60/075467

FILING DATE: 20-FEB-1998

ATTORNEY/AGENT INFORMATION:

NAME: Love, Richard B.

REGISTRATION NUMBER: 34,659

REFERENCE/DOCKET NUMBER: P1085R4

TELEPHONE: 650/225-5530

TELEFAX: 650/952-9881

INFORMATION FOR SEQ ID NO: 71:

SEQUENCE CHARACTERISTICS:

LENGTH: 452 amino acids

TYPE: Amino Acid

TOPOLOGY: Linear

US-09-234-340A-71

Query Match 46.8%; Score 1263.5; DB 4; Length 452;

Best Local Similarity 59.6%; Pred. No. 4,1e-90;

Matches 273; Conservative 26; Mismatches 86; Indels 73; Gaps 11;

QY 30 LGKKGDTVELTCTAS--QKKSIOFHWNKSNQIKILGNQGSF-LTKGPSKLNDRADSRSL 86

DB 11 LVPGGSLRLSCAASGVFSFSHYMHWROAPGKLEWVGVIDPSNGETTYNQFKGRFTL 70

QY 87 W---DQGNFPLIIKNLKIEDSDTYICEVEDQKEVOLVPGLTANSPTHL-LOGOSILTLT 142

DB 71 SRDNRKNTAYLQWNSLRADDTAVYYCARGDYR-----YNGDWFFDVWGQGLVT 119

QY 143 LESPSSPSVQCRSPRGKNIQGS-----KTLVS-----QLEL 126

DB 120 VSSASTKGPSVFPLAAPSSTSGGTALGCLVKDYRPEPTVSNLSGALTSGVHTTTPAVL 179

QY 177 QDSG-----TWCTVLQONKVEFKIDIVPCPAPEPKSCDKTHTC-- 216

DB 180 QSSGLVSLSSVTVTPSSSLGTQTYICNV--NHKPSNTKVD---KKEPKSCDKTHTCRP 233

QY 217 ---PELLGSPSVLPFPKPKDITLMISRTPEVTCVVDVSHEDPEVKFNMTVDGEVHNK 273

DB 234 CPAPELLGSPSVLPFPKPKDITLMISRTPEVTCVVDVSHEDPEVKFNMTVDGEVHNK 293

QY 274 TKREBOYNSTYRVSVLTVLHODMLNGEKYCKCKVSNKALPAPIEKTISAKGQPREPOV 333

DB 294 TKREBOYNSTYRVSVLTVLHODMLNGEKYCKCKVSNKALPAPIEKTISAKGQPREPOV 353

QY 334 YTLPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYS 333

DB 354 YTLPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYS 413

QY 394 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 431

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

QY 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

QY 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

QY 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

FILING DATE: 22-JAN-1998

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 60/075467

FILING DATE: 20-FEB-1998

ATTORNEY/AGENT INFORMATION:

NAME: Love, Richard B.

REGISTRATION NUMBER: 34,659

REFERENCE/DOCKET NUMBER: P1085R4

TELEPHONE: 650/225-5530

TELEFAX: 650/952-9881

INFORMATION FOR SEQ ID NO: 71:

SEQUENCE CHARACTERISTICS:

LENGTH: 452 amino acids

TYPE: Amino Acid

TOPOLOGY: Linear

US-09-234-340A-71

Query Match 46.8%; Score 1263.5; DB 4; Length 452;

Best Local Similarity 59.6%; Pred. No. 4,1e-90;

Matches 273; Conservative 26; Mismatches 86; Indels 73; Gaps 11;

QY 30 LGKKGDTVELTCTAS--QKKSIOFHWNKSNQIKILGNQGSF-LTKGPSKLNDRADSRSL 86

DB 11 LVPGGSLRLSCAASGVFSFSHYMHWROAPGKLEWVGVIDPSNGETTYNQFKGRFTL 70

QY 87 W---DQGNFPLIIKNLKIEDSDTYICEVEDQKEVOLVPGLTANSPTHL-LOGOSILTLT 142

DB 71 SRDNRKNTAYLQWNSLRADDTAVYYCARGDYR-----YNGDWFFDVWGQGLVT 119

QY 143 LESPSSPSVQCRSPRGKNIQGS-----KTLVS-----QLEL 126

DB 120 VSSASTKGPSVFPLAAPSSTSGGTALGCLVKDYRPEPTVSNLSGALTSGVHTTTPAVL 179

QY 177 QDSG-----TWCTVLQONKVEFKIDIVPCPAPEPKSCDKTHTC-- 216

DB 180 QSSGLVSLSSVTVTPSSSLGTQTYICNV--NHKPSNTKVD---KKEPKSCDKTHTCRP 233

QY 217 ---PELLGSPSVLPFPKPKDITLMISRTPEVTCVVDVSHEDPEVKFNMTVDGEVHNK 273

DB 234 CPAPELLGSPSVLPFPKPKDITLMISRTPEVTCVVDVSHEDPEVKFNMTVDGEVHNK 293

QY 274 TKREBOYNSTYRVSVLTVLHODMLNGEKYCKCKVSNKALPAPIEKTISAKGQPREPOV 333

DB 294 TKREBOYNSTYRVSVLTVLHODMLNGEKYCKCKVSNKALPAPIEKTISAKGQPREPOV 353

QY 334 YTLPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYS 333

DB 354 YTLPSRDELTKNQVSLTCLVKGFYPSDIAVEMESNGQPENNYKTTTPVLDSDGSFFLYS 413

QY 394 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 431

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

QY 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

QY 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

QY 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

DB 414 KLTVDKSRWQGNVFSQSVNHEALHNHYTQKSISLSPG 451

EARLIER FILING DATE: 1998-05-18
 NUMBER OF SEQ ID NOS: 108
 SOFTWARE: Patentin Ver. 2.0
 SEQ ID NO 30
 LENGTH: 472
 TYPE: PR
 ORGANISM: Homo sapiens
 US-09-301-593-30

Query Match 46.7%; Score 1263; DB 4; Length 472;
 Best Local Similarity 59.0%; Pred. No. 4.7e-90;
 Matches 271; Conservative 31; Mismatches 83; Indels 74; Gaps 13;

QY 30 LGKKGTVELTCTASQKSIQF--HKMKNQIKILNQSGFLTKPSKLNLRADSRRL 86
 DB 30 LVPGSVKMSCKTSYTFTEYTHWROSHGSKLWIGINPNNIPYNNQFKGRATL 89
 QY 87 W--DQGNPFLIKNIKIEDSDTYICEVEDQKEVQLVFGLTANSDTLLQ--GQSLTL 141
 DB 90 TVGKSSSTAYMELRLSITSEDSAYVFC-----ARRRIAGY---DEGHAMDYWGQGTSV 139
 QY 142 TLESPPGSSPVQCRSPRGKNIQGG-----KTLVS-----QLE 175
 DB 140 TVSSST-KGPSVPLAPSSKSTSGTALGCLVKDYFPEPVTVMNSGALTSGVHTFPAY 198
 QY 176 LQDSG-----TWCTVLQNKKEFKIDIVPCAPRPKSCDKTHTC- 216
 DB 199 LQSSGLYSLSVTVVSSSLGTQYICNV--NHKPSNTKVD---KVEPKSCDKTHTC 252
 QY 217 ---PELLGSPSVFLPPPKPDITMISRTPEVTCVVDVSHEDPEVKFMVYDGVENHA 272
 DB 253 PCAPRLGLGSPVFLPPPKPDITMISRTPEVTCVVDVSHEDPEVKFMVYDGVENHA 312
 QY 273 KTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQ 332
 DB 313 KTKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQ 372
 QY 333 VYTLPSRDELTKNQVSLTCLVKGFYPSDIAVWESNQGPENNYKTTPPVLDSDGSFFLY 392
 DB 373 VYTLPSRDELTKNQVSLTCLVKGFYPSDIAVWESNQGPENNYKTTPPVLDSDGSFFLY 432
 QY 393 SKLTVDKSRMQGNVFCSCVMEHALNHYTQKSLSPG 431
 DB 433 SKLTVDKSRMQGNVFCSCVMEHALNHYTQKSLSPG 471

RESULT 46
 US-08-887-352B-18
 Sequence 18, Application US/08887352B
 Patent No. 5994511
 GENERAL INFORMATION:
 APPLICANT: Henry B. Lowman, Leonard G. Presta, Paula M. Jardieu, John Lowe
 TITLE OF INVENTION: Improved Anti-IgE Antibodies and Method of
 TITLE OF INVENTION: Improving Polypeptides
 NUMBER OF SEQUENCES: 26
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Genentech, Inc.
 STREET: 1 DNA Way
 CITY: South San Francisco
 STATE: California
 COUNTRY: USA
 ZIP: 94080
 COMPUTER READABLE FORM:
 MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-POS
 SOFTWARE: WinPatIn (Genentech)
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/887,352B
 FILING DATE: 03-Jul-1997
 CLASSIFICATION: 530
 ATTORNEY/AGENT INFORMATION:
 NAME: Svoboda, Craig G.

REGISTRATION NUMBER: 39, 044
 REFERENCE/DOCKET NUMBER: P1123
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 650/225-1489
 TELEFAX: 650/952-9881
 INFORMATION FOR SEQ ID NO: 18:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 451 amino acids
 TYPE: Amino Acid
 TOPOLOGY: Linear
 US-08-887-352B-18

Query Match 46.7%; Score 1262; DB 2; Length 451;
 Best Local Similarity 58.6%; Pred. No. 5.3e-90;
 Matches 273; Conservative 25; Mismatches 78; Indels 90; Gaps 12;

QY 30 LGKKGTVELTCTASQ--KKSIOFMKNQIKILNQSGFLTKPSKLN----- 77
 DB 11 LVQPGSLRLSCAVGYSITSGYSNMWIRQAPGKLEWVASIKYGETKYNPSVKGRITL 70
 QY 78 DRADSRRLMDQGNPFLIKNIKIEDSDTYICEVEDQKEVQLVFGLTANSDTLL--LL 134
 DB 71 SRDDSKNTFYQWN-----SLRAEDTAVVYCARGSH-----YFG-----HMHFAV 110
 QY 135 QGQSLTLTLESPPGSSPVQCRSPRGKNIQGG-----KTLVS----- 172
 DB 111 WQGGTLTVVSSASTGSPVFLAPSSKSTSGTALGCLVKDYFPEPVTVMNSGALTSG 170
 QY 173 ---QLELQDSG-----TWCTVLQNKKEFKIDIVPCAPRPKSC 210
 DB 171 VHTFPAYVLQSSGLYLSVTVVSSSLGTQYICNV--NHKPSNTKVD---KVEPKSC 224
 QY 211 DKTHTC-----PELLGSPSVFLPPPKPDITMISRTPEVTCVVDVSHEDPEVKFMVYD 265
 DB 225 DKTHTCPCAPRLGLGSPVFLPPPKPDITMISRTPEVTCVVDVSHEDPEVKFMVYD 284
 QY 266 GVEVNAATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK 325
 DB 285 GVEVNAATKPREQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK 344
 QY 326 GQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNQGPENNYKTTPPVLD 385
 DB 345 GQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNQGPENNYKTTPPVLD 404
 QY 386 DGSFPLYSKLTVDKSRMQGNVFCSCVMEHALNHYTQKSLSPG 431
 DB 405 DGSFPLYSKLTVDKSRMQGNVFCSCVMEHALNHYTQKSLSPG 450

RESULT 47
 US-09-109-207C-18
 Sequence 18, Application US/09109207C
 Patent No. 6172213
 GENERAL INFORMATION:
 APPLICANT: Henry B. Lowman, Leonard G. Presta, Paula M. Jardieu, John Lowe
 TITLE OF INVENTION: Improved Anti-IgE Antibodies and Method of Improving Polypeptide
 FILE REFERENCE: P1123K1
 CURRENT APPLICATION NUMBER: US/09/109,207C
 PRIOR APPLICATION NUMBER: 1998-06-30
 PRIOR FILING DATE: 1997-07-03
 NUMBER OF SEQ ID NOS: 44
 SEQ ID NO 18
 LENGTH: 451
 TYPE: PR
 ORGANISM: Artificial
 FEATURE:
 NAME/KEY: Artificial
 LOCATION: 1-451
 OTHER INFORMATION: Heavy chain sequence derived from MAE11
 US-09-109-207C-18

Query Match 46.7%; Score 1262; DB 3; Length 451;

Best Local Similarity 58.6%; Pred. No. 5.3e-90;
Matches 273; Conservative 25; Mismatches 78; Indels 90; Gaps 12;

```

QY 30 LGKKGDTVELTCTASQ---KKSIQFHMKNSNQIKILGNQGSFLTKGPSKLN-----77
DB 11 LVPGGSLRLSCAVSGYSITSGYSNMWIRQAPKGLBWMVASIKYSGETKYNPSVKGRITI 70
QY 78 DRADSRSLMDQGNFPLIINKLKIEDSDTYICEVEDQKEVQLLVFGLTANSPTH---LL 134
DB 71 SRDSSKNTFTYLOMN-----SLRAEDTAVYYCARGSH-----YFG-----HMHFAV 110
QY 135 OGQSLTFLTESPPGSSPSVQCRRSPRGKNIQGG-----KTLSSVS-----172
DB 111 WGGGTLYTVSSASTKGSVPFLAPSSKSTSGTALGCLVKDYFPPEVTVTSMNSGALTSG 170
QY 173 ----QLELDQSG-----TWCTVLQONQKVEFKIDIVPCAPAPKSC 210
DB 171 VHTFPVAVLQSSGLYSLSVTVTPSSSLGTQTYICNV--NHKPSNTKYD---KVEPKSC 224
QY 211 DKHTHC-----PELLGSPVFLFPKPKDITLMSRPEVTCVVDVSHEDPEVKFMWYVD 265
DB 225 DKHTHCPCAPAPFLGSPVFLFPKPKDITLMSRPEVTCVVDVSHEDPEVKFMWYVD 284
QY 266 GVEVHNAKTPREEOYNSTYRVVSVLTVLHQMNLNKEVKCKVSNKALPAPIEKTISKAK 325
DB 285 GVEVHNAKTPREEOYNSTYRVVSVLTVLHQMNLNKEVKCKVSNKALPAPIEKTISKAK 344
QY 326 GQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTPPVLD 385
DB 345 GQPREPOVYTLPPSRREMTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTPPVLD 404
QY 386 DGSFPLYSKLTVDKSRMGOGNVFCGVMHEALHNHTYQKSLSLSPG 431
DB 405 DGSFPLYSKLTVDKSRMGOGNVFCGVMHEALHNHTYQKSLSLSPG 450

RESULT 48
US-09-282-505-2
; Sequence 2, Application US/09282505A
; Patent No. 6194551
; GENERAL INFORMATION:
; APPLICANT: Esche Ekinadese Idusogie et al.
; TITLE OF INVENTION: Polypeptide Variants
; FILE REFERENCE: P1266R1
; CURRENT APPLICATION NUMBER: US/09/282,505A
; CURRENT FILING DATE: 1999-03-31
; NUMBER OF SEQ ID NOS: 2
; SEQ ID NO 2
; LENGTH: 451
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: Artificial Sequence
; LOCATION: 1-451
; OTHER INFORMATION: Sequence is completely synthesized
; Patent No. 6194551
US-09-282-505-2

```

Query Match 46.7%; Score 1262; DB 3; Length 451;
Best Local Similarity 58.6%; Pred. No. 5.3e-90;
Matches 273; Conservative 25; Mismatches 78; Indels 90; Gaps 12;

```

QY 173 ----QLELDQSG-----TWCTVLQONQKVEFKIDIVPCAPAPKSC 210
DB 171 VHTFPVAVLQSSGLYSLSVTVTPSSSLGTQTYICNV--NHKPSNTKYD---KVEPKSC 224
QY 211 DKHTHC-----PELLGSPVFLFPKPKDITLMSRPEVTCVVDVSHEDPEVKFMWYVD 265
DB 225 DKHTHCPCAPAPFLGSPVFLFPKPKDITLMSRPEVTCVVDVSHEDPEVKFMWYVD 284
QY 266 GVEVHNAKTPREEOYNSTYRVVSVLTVLHQMNLNKEVKCKVSNKALPAPIEKTISKAK 325
DB 285 GVEVHNAKTPREEOYNSTYRVVSVLTVLHQMNLNKEVKCKVSNKALPAPIEKTISKAK 344
QY 326 GQPREPOVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTPPVLD 385
DB 345 GQPREPOVYTLPPSRREMTKNQVSLTCLVKGFYPSDIAVWESNGQPENNYKTTPPVLD 404
QY 386 DGSFPLYSKLTVDKSRMGOGNVFCGVMHEALHNHTYQKSLSLSPG 431
DB 405 DGSFPLYSKLTVDKSRMGOGNVFCGVMHEALHNHTYQKSLSLSPG 450

```

RESULT 49
US-09-054-255-2
; Sequence 2, Application US/09054255
; Patent No. 6242195
; GENERAL INFORMATION:
; APPLICANT: Esche Ekinadese Idusogie et al.
; TITLE OF INVENTION: Polypeptide Variants
; FILE REFERENCE: P1266
; CURRENT APPLICATION NUMBER: US/09/054,255
; CURRENT FILING DATE: 1998-04-02
; NUMBER OF SEQ ID NOS: 2
; SEQ ID NO 2
; LENGTH: 451
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: E27 anti-IgE antibody heavy chain
US-09-054-255-2

Query Match 46.7%; Score 1262; DB 3; Length 451;
Best Local Similarity 58.6%; Pred. No. 5.3e-90;
Matches 273; Conservative 25; Mismatches 78; Indels 90; Gaps 12;

QY 386 DGSFLYSKLTVDKSRWQGNVFSCSVMEALHNHYTQKSLSPG 431
|||
Ddb 405 DGSFLYSKLTVDKSRWQGNVFSCSVMEALHNHYTQKSLSPG 450

```

RESULT 50
US-09-296-005-18
: Sequence 18, Application US/09296005
: Patent No. 6290957
: GENERAL INFORMATION:
: APPLICANT: Henry B. Lowman, Leonard G. Presta, Paula M. Jardiou, John Lowe
: TITLE OF INVENTION: Improved Anti-19E Antibodies and Method of Improving Polypeptides
: FILE REFERENCE: P1123C1r
: CURRENT APPLICATION NUMBER: US/09/296, 005
: CURRENT FILING DATE: 1999-04-21
: EARLIER APPLICATION NUMBER: US 08/887,352
: EARLIER FILING DATE: 1997-07-02
: NUMBER OF SEQ ID NOS: 26
: SEQ ID NO 18
: LENGTH: 451
: TYPE: PRT
: ORGANISM: Artificial Sequence
: FEATURE:
: NAME/KEY: Artificial
: LOCATION: 1-451
: OTHER INFORMATION: Heavy chain sequence derived from MAE11
US-09-296-005-18

```

Query Match	46.7%;	Score 1262;	DB 3;	Length 451;
Best Local Similarity	58.6%;	Pred. No. 5.3e-90;		
Matches 273;	Conservative 25;	Mismatches 78;	Indels 90;	Gaps 12

```

QY      30 LGKGGGTVELCTTAAQ-----KKSIOFHWKNSNOIKILGNQGSFLLTKGSEKLN-----77
Dp      11 LVPGGSLRLASCASVGSYITSGYSMMWMIHQAGKGLQEWVASIKXSGETKYNPSVKGRTI 70
QY      78 DRADSRSLMDQGNFPLIIKMLKIEBSTDYICEVDEQKEBQVLVFGLTANSDFH--LL 134
Dp      71 SRDSSKNTFLQMN-----SLRAEDTAYVYCARGSH-----YFG-----HMHFAV 110
QY      135 QGOSLTLTLESPPGSSPSVQCSPPROKNIQGG-----KTLSSVS-----172
Dp      111 WGGGLTVTVYSSASTKPSVFLPAPSSKSTSGTALGCLVYDPEEPTVYSSMNSGALTSG 170
QY      173 ----OLELDDG-----TWCTVLONOKKVEFKIIDIVPCAPAEKSC 210
Dp      171 WHTFPAVLQSSGLYSLSVTVTPSSLSGTQTYICNV--NHKPSMTKV-----KVEBKSC 224
QY      211 DKHTTC-----PELLGGPSVFLPPPKPHDTLMISTPRETVCMVVDYSHEDPEVFNMYVD 265
Dp      225 DKHTTCPCPAPBLGGPSVFLPPPKPDITMISTPRETVCMVVDYSHEDPEVFNMYVD 284
QY      266 GVEVHNAKTPREEOQNSTYRVVSVYLVYLAQMLNGKEKVCNSKALPAIEKTSIKAK 325
Dp      285 GVEVHNAKTPREEOQNSTYRVVSVYLVYLAQMLNGKEKVCNSKALPAIEKTSIKAK 344
QY      326 GQPREPQVYTLPPSRDELTKNOVSLTGLVKGFPSPDIADVESNQGQPENNYKTPPYLDS 365
Dp      345 GQPREPQVYTLPPSRDEMTKNQVSLTCLVKGFPSPDIADVESNQGQPENNYKTPPYLDS 404
QY      386 DGSFPLYSKLTVDKSRWQGNVPSGCVHMEALAHNNYTKSLSLSPG 431
Dp      405 DGSFPLYSKLTVDKSRWQGNVPSGCVHMEALAHNNYTKSLSLSPG 450

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RESULT 51
US-09-262-846-2
; Sequence 2, Application US/092828246
; Patent No. 6528624
; GENERAL INFORMATION:
; APPLICANT: Eoshe Ekinaduse Idusogie et al
; TITLE OF INVENTION: Polypeptide Variants
; FILE REFERENCE: P1266R2

```

; CURRENT APPLICATION NUMBER: US/09/282,846
 ; CURRENT FILING DATE: 1999-03-31
 ; NUMBER OF SEQ ID NOS: 2
 ; SEQ ID NO 2

Query Match	46.7%;	Score 1262;	DB 4;	Length 451;
Best Local Similarity	58.6%;	Pred. No. 5.3e-90;		
Matches 273;	Conservative 25;	Mismatches 78;	Indels 90;	Gaps 12.

Qy	30	LGKGGVYELCTCAQO----	KSIIQHMKNQNDIKILGNOG5FLLTGKSGKLN-----	77		
Db	11	LVDPGSSLLSCAVSGYSLTSGYSMNWIRQAPKGKLEVVASIKKSGETKNPSVKGRIT	70			
Qy	78	DRADSRSLMDQGNPPLIIKLIKIEDSDTYICEVEDOKEVOLLVFGLTANSOTh--	134			
Db	71	SRDSSKNTFYLMN-----	SLRADTAVVYCARGSH-----	YFG-----	HmHfAV	110
Qy	135	QGGSLTLTLSPGSSPSVQCKSPKGNIOGG-----	KLTLAYS-----	172		
Db	111	WGGGLTVTVSSASTGKPSVFPPLAPSSKSTSGGTALGCLVKDYPPEEPVTVSNMSGALTSG	170			
Qy	173	-----QLELDDSG-----	TWCTVLONOKKVEFKIDIVCPAPBPKSC	210		
Db	171	VHFPFPAVLQSSGVLSSVTVBPSSLSLGTQYIYICNV--	NHKRPNKTVD----	KVPEPKSC	224	
Qy	211	DKHTHC-----	PELLGGSPVFLFPKPKDITLMISTRTPEVTCVVDVSHEDPEYKFNMYVD	265		
Db	225	DKHTPCPCPAPELLGGSPVFLFPKPKDITLMISTRTPEVTCVVDVSHEDPEYKFNMYVD	284			
Qy	266	GVEVHNAKTRPREEOYNSTYRVVSVLTVLHODMLNGEKYKCKVSNKALPAPIETKISKAK	325			
Db	285	GVEVHNAKTRPREEOYNSTYRVVSVLTVLHODMLNGEKYKCKVSNKALPAPIETKISKAK	344			
Qy	326	GQREPOVYTLTPPSDELTKQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTTPVLDS	385			
Db	345	GQREPOVYTLTPPSDEEMTKQVSLTCLVKGFYPSDIAVEMESNGOPENNYKTTTPVLDS	404			
Qy	386	DGSFFLYSKLTVDKSRMOQGNFCSVNHALLAHNYTKSLSLSPG	431			
Db	405	DGSFFLYSKLTVDKSRMOQGNFCSVNHALLAHNYTKSLSLSPG	450			

```

RESULT 52
US-09-680-145-2
Sequence 2, Application US/09680145
Patent No. 6538124
GENERAL INFORMATION:
APPLICANT: Esche Ekinaduse Idusogie et al.
TITLE OF INVENTION: Polypeptide Variants
FILE REFERENCE: P1266R1
CURRENT APPLICATION NUMBER: US/09/680,145
CURRENT FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 09/282,505
PRIOR FILING DATE: 1999-03-13
NUMBER OF SEQ ID NOS: 2
SEQ ID NO 2
LENGTH: 451
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
NAME/KEY: Artificial Sequence
LOCATION: 1-451
OTHER INFORMATION: Sequence is completely synthesized
Patent NO. 6538124

```



```

;
; LENGTH: 467 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: LUNGTUT11
; CLONE: 2747531
;
US-09-049-672A-8

Query Match          46.7%; Score 1261.5; DB 3; Length 467;
Best Local Similarity 55.6%; Pred. No. 6.1e-90;
Matches 278; Conservative 24; Mismatches 73; Indels 125; Gaps 14;

QY 16 LALLPAATGANKV-----LGKKGDTVELTCTAS--QKSIQPHW-----53
DB 8 LFLVAATGTHAQQVOLVQSGAEVKKPGASVQVCTVSGFTLSDSLVAHWRAQPGQGLEWM 67
QY 54 -----KNSNQI---KILGNQGSFLTGPGLNDRADRSRLWDQGNFPLIKNLKIEDSD 105
DB 68 GGLAPENGSAVYAQKFLGR-----LTISEDTSDTA-----YMFANLGSBDA 111
QY 106 TVICEVEDQKEVOLLVFGILTANSDTHL-----LQGSULTLESPPSSPSVQCRSPRG 160
DB 112 IYCC-----ARQHYDFEFDMQGTMTVTSASATKGPVFLAPSS 152
QY 161 KNIQGG-----KITLSVS-----QLEIODSG-----180
DB 153 KATSGGTAAAGCLVKDYPPEPVTVSNWNGALTSGVHTFPVAVLQSSGLYSLSVVTVSSS 212
QY 181 ----TWCTVLONOKKVEFKIDIVPCPABEPKSCDKTHTC-----PELLGSPVFLPPK 231
DB 213 LGTYITICNV--NHKPSNTRKD---KXVEPKSCDKTHTCPCPAPPELLGSPVFLPPK 266
QY 232 PKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVNAKTKPREEQYNSTYRVSVL 291
DB 267 PKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVNAKTKPREEQYNSTYRVSVL 326
QY 292 TVLHODWLNKGEKCKVSKKALPAPIEKTISKAKGPRRPQVYTLTPRSDELTKNOVSLT 351
DB 327 TVLHODWLNKGEKCKVSKKALPAPIEKTISKAKGPRRPQVYTLTPRSDEMTKNOVSLT 386
QY 352 CLVKGFPYPSDIAVEMESNGQPENNYKTTPPVLDSDGSFYLSTYLDKSRMQQGNVFSCS 411
DB 387 CLVKGFPYPSDIAVEMESNGQPENNYKTTPPVLDSDGSFYLSTYLDKSRMQQGNVFSCS 446
QY 412 VMHEALHNHYTQKSLSLSPG 431
DB 447 VMHEALHNHYTQKSLSLSPG 466

RESULT 55
US-09-499-846-12
; Sequence 12, Application US/09499846
; Patent No. 6656728
; GENERAL INFORMATION:
; APPLICANT: Kavaugh et al.
; TITLE OF INVENTION: FIBROBLAST GROWTH FACTOR
; FILE REFERENCE: RECEPTOR-IMMUNOGLOBULIN FUSION
; CURRENT APPLICATION NUMBER: US/09/499,846
; FILING DATE: 2000-02-07
; NUMBER OF SEQ ID NOS: 12
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 488
; TYPE: PRT
; ORGANISM: Homo sapiens
;
US-09-499-846-12

Query Match          46.7%; Score 1261; DB 4; Length 488;
Best Local Similarity 57.9%; Pred. No. 7.1e-90;
Matches 272; Conservative 30; Mismatches 88; Indels 80; Gaps 11;
```

```

QY 15 OLALLPAATGANKVVLGKKGDTVELTCTAQQKSIQPHW--KNSNQIKILGNQGSFLTGP 73
DB 45 KLHAYFPA-----KTVKFKCPSGGTPNTLMLKNGKFKPDHRIAGIKV---89
QY 74 SKLNDRADRSRLW-----DQGNFPLIKNLKIEDSDTYICEVEDQKEVOLLVF 123
DB 90 -----RAYTWSIIDSVPBDKGNVTCTIVENEGSINTYQLDIVERSPHRPLQA 140
QY 124 GILTANSDTHLLQGSULTLESPP-----GSS-----PSYQCSPPGKXI-163
DB 141 GLPARKTVALSNVEFMCKVSDPQPHIQWLKHLEVNOSKIGPDNLPHYQILKTAGVNTT 200
QY 164 -QGKTLISVSOLELDQSGTWTCT-----TVLQNKQKVEFKIDIVCPA--PE 206
DB 201 DKNEVLLKRVNFEEDAGEITCLAGNSIGLSHSMALTVE---ALERRPAMTSPLYIE 257
QY 207 PKSCDKTHTC-----PELLGSPVFLPPKPKDTLMISRTPEVTCVVVDVSHEDPEVK 261
DB 268 PKSCDKTHTCPCPAPALEGGPSVFLPFPKPKDTLMISRTPEVTCVVVDVSHEDPEVK 317
QY 262 WYDGVENVHNAKTKPREEQYNSTYRVSVLTVLHODWLNKGEKCKVSKKALPAPIEKT 321
DB 318 WYDGVENVHNAKTKPREEQYNSTYRVSVLTVLHODWLNKGEKCKVSKKALPAPIEKT 377
QY 322 SKAKGQPREPQVYTLTPRSDELTKNOVSLTCLVKGFPYPSDIAVEMESNGQPENNYKTTP 381
DB 378 SKAKGQPREPQVYTLTPRSDELTKNOVSLTCLVKGFPYPSDIAVEMESNGQPENNYKTTP 437
QY 382 VLDSDGSFFLYSKLTVDKSRMQQGNVFSCSVMHEALHNHYTQKSLSLSPG 431
DB 438 VLDSDGSFFLYSKLTVDKSRMQQGNVFSCSVMHEALHNHYTQKSLSLSPG 487
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RESULT 56
US-08-466-151-8
; Sequence 8, Application US/08466151
; Patent No. 6037453
; GENERAL INFORMATION:
; APPLICANT: Jardiou, Paula M.
; APPLICANT: Presta, Leonard G.
; TITLE OF INVENTION: Immunoglobulin Variants
; NUMBER OF SEQUENCES: 65
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genentech, Inc.
; STREET: 1 DNA Way
; CITY: South San Francisco
; STATE: California
; COUNTRY: USA
; ZIP: 94080
;
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Winpacin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/466,151
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/466163
FILING DATE: 06-Jun-1995
APPLICATION NUMBER: 08/405617
FILING DATE: 15-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/185899
FILING DATE: 26-JAN-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/879495
FILING DATE: 07-MAY-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/744768
FILING DATE: 14-AUG-1991
ATTORNEY/AGENT INFORMATION:
```